THE UNIVERSITY OF HULL

EDUCATIONAL REFORM AS A DEVELOPMENT STRATEGY
The Experience of Ghana

being a Thesis submitted for the Degree of Doctor of Philosophy

in the University of Hull

by

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October 1995

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ACKNOWLEDGEMENTS

In the course of my studies which culminated in the writing of this thesis, I consulted many people in the UK and in Ghana. It is impossible to thank all of them individually but their contributions in terms of research, ideas and contacts are greatly appreciated.

However, I must thank, as an indivividual, my supervisor, Paul Milne, for his support and advice which went beyond the mere mechanics of supervision. I feel privileged to have worked under him. Sincere thanks also go to Susan and Thurston and to Marjorie and Alan for all their help.

I am also grateful to colleagues at the University of Cape Coast, Ghana and the many headmasters and headmistresses, teachers, students, education officials, parents and other stakeholders in education who provided information. I am indebted to Kofi Appiah for his hospitality while I was researching in the Asutifi and Asunafo districts and to Lord Kue-Duke and Stephen Sombonah for hosting me in Sunyani. Indebted, too, am I to Professor Naa Afarley Sackeyfio for her unconditional material and moral support.

Finally, my special thanks go to my wife, Bridget, and our children who suffered isolation during my sojourn in Hull. I dedicate this work to them and to the memory of my mother who died while I was away in England.

The University of Hull.
September 1995

A.L.D.

ABSTRACT

In 1957, when Ghana became independent, development was being identified with economic growth. Consequently, Ghana introduced educational innovations aimed at providing qualified personnel to facilitate economic growth and thus accelerate national development. But these measures proved ineffective. Therefore, in 1973, the country's educational priorities were reappraised. This provided the framework for an educational reform programme whose implementation commenced in September 1987.

The purpose of this study was to explore the status of the 1987 reform programme in order to assess its prospects and potential for national development using, as indices of judgement, lessons from the educational experiences of Japan and Sweden and eleven developing countries (Brazil, Chile, China, Cuba, India, Malaysia, Nigeria, PNG, Tanzania, Zambia and Zimbabwe), and Ghana's own past experiences.

Some data for the study were obtained by interviewing 141 stakeholders including teachers, headmasters, education officials, Teachers' Association officials, students and parents. Other data were derived from questionnaires administered to a sub-sample of 84 teachers from a national teacher sample; 40 other teachers and 540 students from 10 case-study schools, comprising six senior secondary and four junior secondary schools in the Brong-Ahafo Region. These data were

supplemented by non-participant observation data collected from the case-study schools, official records and media reports.

The results of the study suggest that although stakeholders accept the rationale of the reform programme, its prospects are fragile because both the culture of educational provision and the attitudes of stakeholders contradict the objectives of the reform. There are mismatches between curricular intentions and actual implementation and students are not receiving the necessary formation to enable them meet the demands of the dualistic economy. The curricular, pedagogic and administrative problems of the reform are similar to those observed in other developing countries and are attributable to a hasty implementation based on a top-down, bureaucratic and power-coercive approach.

The study concludes that unless these contradictions and problems are rectified, the reform programme will have little impact. It proposes a model that could minimise the problems of implementation and facilitate future reform efforts.

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LIST OF ABBREVIATIONS AND ACRONYMS

ADP Accelerated Development Plan
BECE Basic Education Certificate Examination
CAC Central Advisory Committee on Education
CHASS Conference of Heads of Assisted Secondary Schools
CPP Convention People's Party
CRDD Curriculum Research and Development Division
ERP Economic Recovery Programme
GBC Ghana Broadcasting Corporation
GBC TV Ghana Broadcasting Corporation Television
GES Ghana Education Service
GNAT Ghana National Association of Teachers
JSS Junior Secondary School
JSSSQ Junior Secondary School Student Questionnaire
MOE Ministry of Education
NLC National Liberation Council
NRC National Redemption Council
NUGS National Union of Ghanaian Students
PAMSCAD Programme of Action to Mitigate the Social Cost of Adjustment and Development
PNDC Provisional National Defence Council
PNG Papua New Guinea
RECAAST Regional Colleges of Applied Arts Sciences and Technology
SFSQ Sixth Form Student Questionnaire
SHAPE Self Help Action Programme in Education
SSS Senior Secondary School
SSCE Senior Secondary Certificate Examination
SSCEP Secondary Schools Community Extension Project Senior Secondary Student Questionnaire
UPE Universal Primary Education
SSSSQ Senior Secondary School Student Questionnaire
Zintec Zimbabwe National Teacher Education Course
ZIMSCI Zimbabwe Scientific Programme

INTRODUCTION

i. Background to the study

In the 1950s and 60s, the value of education for the individual and for the society was measured in terms of its economic benefits. This was a period when development was identified with economic growth. Consequently, developing countries tended to gear their efforts towards the provision of those elements of the educational system that would contribute to economic growth - for example, the training of qualified personnel for the economy. Independent developing countries therefore gave greater attention to the provision of secondary and higher education. Resources were applied to the development of secondary and higher education, sometimes to the extent of stifling or even halting the development of primary education and efforts aimed at fighting illiteracy (Tanguiane, 1990; Curle, 1970; Harbison and Myers, 1964; Harbison, 1961).

The economic growth craze was criticised on several grounds. First, it was argued that the emphasis on economic growth tended to separate issues related to the development of education and the economy, and the interaction between them, from the sets of relations which regulate social action and influence social structures and processes. Second, it was criticised on the grounds that it ignored the fact that the interaction between economic growth and education occurs through a complex system of relations inherent in society and in social, political and cultural institutions. Furthermore, the critics pointed out that the social,

cultural and other functions of education which are not less important than economic growth were neglected (Tanguiane, 1990).

The arguments above indicate that the concept 'development' is too amorphous a term to be pigeon-holed within the confines of economic growth. The literature on education and development suggests that the excessive emphasis placed on economic growth with scant regard for social changes and the priority accorded secondary and higher education tend to aggravate social injustice. This is because post primary education in developing countries tends to be reserved for privileged minorities while a large proportion of the people remain illiterate and deprived even of basic education. Dumont's ***False Start in Africa*** vividly illustrates the exploitative and immoral tendencies and privileges associated with the select few in the developing countries. For example, Dumont recounts that a Gabonese MP, working for only one and a half months, "earns as much as the average peasant farmer in 36 years, a whole lifetime of hard labour" (Dumont, 1969: 81). Thus, many developing countries felt threatened by the emergence of an elitist class and the development of a "qualification escalation" in labour markets that were already saturated and stagnating (Scudder and Colson, 1980). Besides, by the mid-1970s, it had become increasingly clear that the massive investment in education had been misplaced: the economic growth expected was not forthcoming (Clarke, 1984:247).

The decade of the 70s therefore prompted the developing countries that their progress was being seriously impeded by archaic social structures because not many people were getting the message that would assure social change. It was also evident that development was not to be limited to economic growth because it constituted a much more complex and diversified process. Many countries understood that even economic development itself was not only just a technical and economic process but also a social process implying substantial social advances. Yet the trends in many developing countries were such that social advances were obstructed. The 'false start' made by Africa, in particular, was complicated by the fact that schooling tended to alienate young people from their home environment, particularly where the environment was rural (Gould, 1982). Besides, the education offered the youth often assumed an aspiration toward higher education to the extent that the fate of dropouts was hardly taken into account.

It would appear from the foregoing that education had failed to give developing countries the necessary push in their development effort. Yet there is abundant evidence that the contribution of education to the improvement of the individual and collective productivity and individual wages , and to economic growth and development is substantial (Lockheed *et al,* 1980; Lockheed and Verspoor, 1991; Gillis *et al,* 1987). So if the developing countries had not reaped dividends from their investment in education, it must be that educational priorities had been

misplaced. The Harare Declaration of 1982 recognised this fact in the case of African countries and advocated prompt educational reform(Unesco, 1982)

In 1987, Ghana responded to the issues addressed in the Harare Declaration. As part of a general programme aimed at the improvement of economic and social conditions through the reform of economic, social and cultural structures and practices that tended to impede development, the Government of Ghana began the implementation of an educational reform programme. As far back as 1975, such an innovation had been initiated and developed but was never fully implemented for reasons that have never been empirically determined. The current educational reform programme is a revised version of the 1975 structure and content of education. The emerging system provides for nine years of free basic education (six years primary followed by three years junior secondary schooling), three years senior secondary and four years university education. It replaces a 6-4-7-3 system (i.e. six years of primary schooling followed by four years middle school education, five to seven years secondary school level education and three to four years of university education). The reform implies a cut in the duration of pre-university education from 17 years to 12 years. The major objectives of the reform are:

1. to make education more accessible to all children of school-going age, while eliminating waste and, thus, reducing the cost of education;
2. to make education an important tool for economic transformation by equipping the educands with skills that would enable them combine the brain with the brawn for the improvement of themselves and their society;

3. to inculcate in the educands the spirit of national consciousness, sense of social justice and moral uprightness;
4. to help the educands assert their cultural identity.

ii. Statement of the Problem

Well-meaning or ambitious as the objectives of Ghana's educational reform may seem, there is no guarantee that the reform will achieve the ends envisaged, especially as previous efforts had failed to make an impact (see, for example, Boakye, 1977, 1983). It is also worthy of note that the literature on educational innovation has repeatedly concluded that educational reforms have often had to contend with three problems relating the characteristics of the existing school system; the characteristics of the innovation; and the innovation itself (Thompson, 1981:152-182) .Associated with these characteristics are three specific outcomes identified by Psacharopoulos (1990) and Sinclair (1977) which are considered typical of previous educational reform programmes in Africa, namely, that:

a) The intended programme was never implemented in the first place.

b) Even if an attempt at implementation were made, it failed to be completed or achieve a minimum critical mass so as to have an impact.

c) Although the policy was implemented, it did not have the intended effect.

What is not readily available is a rigorous analysis of unsuccessful previous innovations. This deficiency is worsened by severe limitations on efforts to collect information concerning the obstacles to the implementation of educational innovations in developing countries, as observed by McGinn *et al* (1979).

In view of these nagging problems that often undermine efforts at educational innovations in developing countries, the thesis of the present study is that Ghana's 1987 educational reform programme is not guided by the experiences of other developing countries which tried to implement similar educational problems and therefore the Ghanaian reform programme neither has prospects nor a potential to facilitate overall national development, unless the changes in structure and content of education are accompanied by changes in the culture of educational provision and in the attitudes of stakeholders, too.

iii. Objectives of the Study

Based on the above thesis, the primary purpose of the study was to undertake an exploratory study of the reform programme which was adopted nationwide in September 1987 with a view to determining how far the objectives of the educational reform are consistent with development goals; whether the implementation is progressing according to the blueprint; how far stakeholders understand the implications of the reforms; whether attitudes are changing to reflect the structural imbalances that the reforms seek to correct; and whether the content of education is congruent with the actual needs of communities. A secondary purpose of the study is to compare the Ghanaian experience with those of other developing countries in order to explore the possibility of proposing a model of educational reform with good prospects for success and a potential to facilitate development.

iv. Research Questions

In line with the objectives of the study, attempts were made to answer the following questions:

1. What roles were assigned to education development and curriculum development to reflect the current national development goals of Ghana?
2. What strategy of curriculum development was used?
3. What factors influenced various stakeholders during the innovation process which culminated in the present structure and content of education in Ghana?
4. How are the new curricula transacted in the junior secondary school (JSS) and senior secondary school (SSS)?
5. What factors can be identified for any mismatch between curriculum intentions held by curriculum innovators and the actual implementation of the JSS and SSS programmes?
6. What pre-vocational and technical skills are actually learnt by the third year of JSS and the third year of SSS?
7. What are the perceptions of parents, teachers, administrators and students regarding the viability and utility of the new education system?
8. What subjects are popular among final year senior secondary school students?
9. What are the attitudes of JSS and SSS students regarding occupational choices and preferences; self-employment; living and working in rural areas; the acquisition of certificates; and higher education? Do the opinions of students still following the old system differ from those undergoing 'reformed' education?
10. What has happened to 'dropouts' at the JSS level?
11. What positive effects has the introduction of the educational reform programme had on access to primary education?
12. In what ways are school activities being integrated with the activities of the communities in which the schools are situated?

v. Significance of the Study

Educational policies or innovations which reflect the realities of the classroom and the expectations and expertise of ordinary teachers are most likely to succeed (Vulliamy, 1990). Research is crucial in ensuring that this condition is met. Yet developing countries often have no research findings that accurately describe the actual conditions at the grassroots level. As Vulliamy (1990) has pointed out, information available is often the result of research by international funding agencies who employ typical input-output research design and data generated from questionnaires based on assumptions that the policy is implemented in accordance with the policy directives. Sometimes, also, officials of such international bodies rely on brief fact-finding visits to schools as a means of obtaining information concerning the operation of the programme. Such brief visits afford no opportunity for the researchers to delve beneath the 'official' version of the status of the programme and thus tend to reproduce the rhetoric of the policy. Consequently stakeholders derive little benefit from such evaluations since they often do not reflect the actual state of affairs (see Psacharopoulos and Loxley, 1985; Saunders, 1982 and 1984).

The present study which employed both quantitative and qualitative techniques did delve below the surface of the official version of the reform process. Thus, its findings which include an analysis of issues strongly related to the cultural context of schooling, may be useful in identifying appropriate questions which need to be answered when a larger-scale rigorous evaluation of the educational reform process is to be undertaken.

Second, specific problems of the innovation revealed by the study could serve as bases for action research to elaborate and solve the problems.

Furthermore, policy-makers may find the results of the study useful in making decisions concerning the continuation, adjustment or abandonment of the programme.

vi. Limitations of the Study

The study was constrained by the fact that it is not possible fully to evaluate an innovation for many years after it has been implemented - for example, the Ghanaian reforms seek, among other things, to develop the capacity of young people for self-employment. This can only be tested when the products of the schools have had time to demonstrate their capacity in the world of work.

Consequently, this study could only explore the extent to which the products of the reformed educational system had received the kind of formation that the system hopes to give them as a prerequisite for a good take-off in socio-economic, political and cultural development.

vii. Delimitation of the Study

The study included a background study involving a review of published works on educational reforms in Brazil, China, Chile, Cuba, India, Malaysia, Papua New

Guinea, Nigeria, Zambia and Zimbabwe. The common themes in these reforms were noted and compared with the events unfolding in Ghana. The reasons for selecting the countries are elaborated on in Chapter 2. Previous educational reform programmes in Japan and Sweden were also reviewed in order to see how the programmes contributed to the development of those countries.

The study of the ongoing educational reform programme in Ghana was done on a small scale to facilitate an intensive study of the implementation of the programme and the transaction of the new syllabuses at the school level. Its substance comprised a series of case studies conducted in four districts of the Brong- Ahafo Region of Ghana. The Brong-Ahafo Region was selected for the purpose because it typifies average conditions in educational provision (see Chapter 4) and the researcher elected to conduct the research in the Asutifi, Asunafo, Tano and Sunyani districts. These districts were chosen because they share boundaries and have among them, a cluster of secondary schools which offer all the courses into which senior secondary students are streamed. Moreover, the choice was influenced by the fact that the researcher was familiar with the districts and so would not waste valuable time trying to overcome settling in problems before immersing himself in the field.

Respondents for the study included samples of stakeholders in the four selected districts. The sampling procedures and the actors included in the study are described in detail in Chapter 4.

viii. Assumptions of the Study

The study is based on the basic assumptions of human capital theory: that schooling is a good investment with a good private rate of return to the individual as well as a good rate of social return to the nation (Scudder and Colson, 1980; UNESCO, 1963:9).

The study also assumes that education will promote more enlightened conduct of public affairs, and a more intelligent participation of all citizens in a democracy.

Thus, the central assumption of the study is that schooling has positive functions for national development.

ix. Definition of Terms

EDUCATIONAL REFORM refers to a complete overhaul of an existing educational system, culminating in a new structure, new curriculum objectives, new curriculum content, new assessment procedures and new socio-economic political and cultural orientation. It involves a series of innovations within the school system.

DEVELOPMENT in this context means improvement in the quality of life of the individual and the society , proxied by the level of living, individual and communal earning capacity, health of the people, degree of social security, extent of freedom from oppression, squalor and ignorance.

DEVELOPING COUNTRIES are those countries that are plagued by several or all of the following: low per capita Gross National Product, (below $600), high population growth rate, high illiteracy rate, poorly developed service sector, squalor and political unrest.

x. Organisation of the study and layout of the document

The chapters in this document have been organised to accommodate the principles and practice of educational reform in selected countries, and a report of field research conducted in Ghana to assess the prospects and potential of that country's ongoing educational reform programme.

Accordingly, the document has been subdivided into six chapters, preceded by an introduction that outlines the background to the study and states the problem and objectives of study as well as the questions to be answered. Also, this introductory section identifies the critical features of the study and outlines some uses to which the findings of the study could be put, pointing out the study's limitations and delimitation as well as the assumptions on which it is based.

Chapter 1 discusses pertinent issues concerning development with reference to the evolution of development thought, the economic growth concept of development as well as the structuralist conception of development. This chapter also includes a discussion of some approaches to development and the role of education in the development process.

Chapter 2 deals with theoretical issues concerning educational reform. The chapter contains a critique of the educational experiences of Japan and Sweden with special reference to the role education played in the two countries' development. Also, cases of educational reform in China, Cuba, Malaysia, Brazil, India, Chile, Papua New Guinea, Nigeria, Tanzania , Zambia and Zimbabwe are reviewed and lessons drawn have hugely informed the study of the Ghanaian educational reform programme.

Chapter 3 describes the provision of education in Ghana in both historical and contemporary contexts. Also included here is a review of economic and social conditions in Ghana in the 1980s and early 1990s and their implications for the education sector. This review is followed by an outline of the highlights of the educational reform programme launched in September 1987.

Chapter 4 outlines the procedure employed in undertaking an exploratory study of Ghana's 1987 educational programme. The research approach, design and data collection techniques are described. Information regarding the validity of the instruments is provided and methods for analysing the field data are also described.

Chapter 5 reports and discusses the research findings, these being preceded by the researcher's record of his reflections on the research process in retrospect and a discussion of the characteristics of the field data. Conclusions drawn from the results are then presented.

Chapter 6 deals with policy implications and theoretical perspectives of the results of the study. It discusses the prospects of the 1987 educational reform programme and its potential for national development and suggests an alternative model of educational reform which could address the problems inherent in the present model on which the 1987 reform is based. Also included in this chapter is an assessment of the overall importance of the study with regard to the implications of its results for educational theory and the formulation of future educational policies in Ghana. Areas for further research are suggested.

Summary

This section describes how education failed to meet the expectations of developing countries in the decade of the 1970s and how this failure culminated in a series of educational reforms. The section states that the experiences of two developed countries and eleven developing countries have been used to highlight examples of success on the one hand and underscore the dilemma of developing countries on the other. An outline of a study to appraise Ghana's efforts at treading the development path via educational reform is provided, the focus of which is an exploratory study of the educational reform programme begun in September 1987. The section ends with an outline of the contents of this document.

CHAPTER 1

THE DEVELOPMENT PROCESS AND EDUCATION IN DEVELOPING COUNTRIES

1.1 Overview

The term "development" means different things to different people. Therefore this chapter will review the origins of ideas about development and how these ideas have been articulated and systematised to produce a variety of present-day development theories. It will be shown that all modern development theories suggest certain elements that must be included in an all-embracing definition of the concept "development". The role of education in the development process is acknowledged.

1.2 Pertinent Issues in Modern Development Thought

Fägerlind and Saha (1989) have categorised the earliest ideas about development under four models, namely:

i) The Classic Cyclical Theory;
ii) The Augustinian Christian Theory;
iii) The Linear Theory; and
iv) The Linear Cyclical Theory.

The classic cyclical model represents Graeco-Roman views about change and development. By this theory, development consists of perpetual cycles of growth and decay, analogous with plant life cycle or the rise and fall of civilisations (Fägerlind and Saha, 1989).

When Christianity became a state religion in the fifth century ideas about development changed, with the notion of a never-ending cycle being suppressed by the Augustinian Christian theory. This theory postulated one major cycle which would culminate in the demise of the material world, giving place to an eternal world.

The events of the Renaissance in the seventeenth and eighteenth centuries challenged the traditional Christian thought. This period favoured the emergence of alternative theories of development. Of particular importance during the period was the view that:

> pure knowledge and science supersede theological knowledge, that natural processes are cumulative, logical and unlimited in terms of growth, and that the task of statecraft is to remove obstruction to the natural progress of nature and mankind (Fägerlind and Saha, 1989:9)

The French philosopher René Descartes promoted the science of critical enquiry during the period and the German Leibniz proposed that the path of progress (development) occurs continuously, gradually and cumulatively. A similar view was held by another German, Immanuel Kant. For him, civilization would continue to advance; its tempo could be impeded, but the process would never be completely halted. Condorcet and Rousseau of France, and Confucius of China held similar views, too (Fägerlind and Saha, 1983; Becker and Barnes, 1961). These views marked the beginnings of linearity in development thought.

The eighteenth century philosophy enhanced the evolution of more systematic and complex theories of change and development by the turn of the nineteenth century.

These theories are called evolutionary or organic theories. They were based upon the assumptions that change was a natural phenomenon; that it had a direction; that it was bound to occur; that it was continuous; that it was necessary; and that it occurred through the same type of causes. Fägerlind and Saha (1989) feel that Georg Friedrich Hegel's notion of the dialectic and his idealistic and deterministic view of history contributed to the refinement of evolutionary theory though the credit is given to the French philosopher and sociologist Auguste Compte. Compte objected to God being the focal point of evolutionary theory while Hegel interpreted history as "God's will". Compte saw progress as man's reward for scientific endeavour. For him, progress consisted in three stages - his so-called Law of Three Stages. First was the ***Theological stage***, when the society was dominated by "priests", governed by the military, and was built upon the family as the major social unit. The second was the ***metaphysical stage*** when men's social life was shaped by the wisdom of philosophers. Third was the ***Scientific*** or ***Positive*** stage which, Compte believed, could be reached through the study of the laws of nature and scientific experimentation.

In the nineteenth century, the British philosopher and sociologist Herbert Spencer propounded a variant of evolutionary theory, based on the Malthusian principle of "survival of the fittest". For Spencer, evolution consisted in a greater specialisation and differentiation of the structure of society, as opposed to Compte's view that evolution involved moral progress and the advancement of ideas. Again, while Compte believed that human intervention through the

acquisition and application of scientific knowledge was crucial to the evolutionary process, Spencer believed in a *laissez-faire* system, consistent with the "survival of the fittest" principle. As Fägerlind and his colleague put it: "For Spencer, the poor were poor because they were less fit; the rich on the other hand deserved to be rich" (Fägerlind and Saha, 1989: 13).

Evolutionary theory prevailed right into the early twentieth century and influenced Durkheim's metaphorical notion of society as a living organism that develops from a simple, primitive stage to a complex, modern one. The implication of this general theory was that the poor, non-industrial societies represented a primitive stage of evolution, while the industrialised countries depicted the more complex and civilised stage. All societies were considered to be evolving in a progressive direction towards end-points represented by the complex societies. The less developed societies were expected to reach those end-points eventually. Thus, some scholars have argued that evolutionary theory provided colonialism with a theoretical basis (see Fägerlind and Saha, 1989).

By the twentieth century, evolutionary theory could no longer effectively explain development. Certain aspects of social behaviour in relation to the level of development of any society could not be explained in terms of the origins of that society. Neither could the theory explain social anomalies such as "the survival of highly traditional rituals in modern industrial environments" (Fägerlind and Saha, 1989). Besides, the unilinear path of development did not account for the

experience of the socialist states. Furthermore, evolutionary theory had no explanation for how a society passed from one stage to the next. Moreover, the events of the two World Wars had shown that societies can decline as well as make progress, so that the assumption about the inevitable progress of mankind was questionable.

Consequently, another linear theory called Structural-Functionalism was propounded. This theory, championed by Talcott Parsons and Robert K. Merton, dominated the social sciences in the 1950s. Its basic principles were that society is a system made up of interrelated parts such as religion, education, political structures, the family, etc., which constantly seek to be in equilibrium. The interrelationship of the parts occurs by consensus and any event that does not follow the normal pattern produces tension, whereupon the constituent parts adjust in order to achieve equilibrium again. Structural-functionalists believe that society changes; but they are silent about evolution over a long period of time. Also, structural-functionalists consider conflict as inimical to social cohesion and harmony.

By the 1970s, structuralism had begun to attract criticism. It was accused of being ideologically biased in favour of the existing state of affairs and also of projecting only the static aspects of society to the neglect of change, process, conflict and dissent. It was therefore branded as opposed to social reform or development (Fägerlind and Saha, 1989).

Talcott Parsons eventually fused structural-functionalism and evolutionism into neo-evolutionism which provided a perspective within which he could explain that societies evolve along an evolutionary path through the processes of integration, differentiation and re-integration. This new insight favoured the emergence of another linear theory called Modernisation Theory (Parsons, 1966).

Modernisation theory sought to project an optimistic view of mankind's future after the two World Wars. Initially, the theory was quite silent about further development of already modern, industrialised societies. Such societies were considered to have attained the ultimate and their experience was supposed to guide those societies still on the road to modernity (Fägerlind and Saha, 1989, Huntington, 1976).

Modernisation theory assumed a causal link between modern behaviour, modern society and economic development and thus provoked criticism on the grounds of lack of empirical support (cf. Inkeles and Smith, 1974; Delacroix and Ragin, 1978; Sutcliffe, 1978). Also, the assumption that modern values and attitudes are incompatible with traditional ones has been criticised. The critics point out that in Japan, for example, traditional forms of labour appear to have contributed to economic growth, while the same commitments were observed to be stumbling blocks in the West (Gusfield, 1967). Furthermore, the assumption that modern values and behaviour by individuals would lead to socio-economic development at the macro level has been questioned because society is not just the totality of

the individuals in it (Portes, 1973). Also considered unacceptable has been the assumption that the end-points of the modernisation process represents the level of development of the rich industrialised countries. Hoogvelt (1976) feels that the assumption is ideologically biased and ethnocentric since it suggests that for a society to be modern it must become Western (see, also, Laite, 1988: 162-63).

Economists also put forward a theory parallel to modernisation theory called Human Capital Theory. It focused on the productive capacity of human manpower in the development process. Its central postulate was that "the most efficient path to national development of any society lies in the improvement of its population" (Fägerlind and Saha, 1989: 17-18). This improvement of population comes through education. Thus, investment in education was seen as essential investment in human capital (Schultz, 1961). Human capital theory therefore provided justification for large public expenditure on education. It was compatible with Western ideologies of democracy and liberal progressivism which attributed economic malaise in countries to factors within the countries themselves rather than to external factors. Investment in human capital was believed to give to the individual economic success which would result in economic growth for the society (Karable and Halsey, 1977; Blaug, 1970, 1976).

However, there has been some controversy as to whether, or to what extent, education is directly related to improvements in occupation or income (Jencks *et al* 1973; Saha, 1991), since variables like family background and innate ability

are worthy established rivals (Fägerlind, 1975; Jencks *et al,* 1979). Moreover, individual attainment is affected by structural factors such as economic, political and social, depending on whether they favour or discriminate against some strata of the society. At the macro level, it is assumed that there is an unexplained residual variance believed to represent the contribution of human capital of which education is considered the most important (Vaizey, 1972; Schultz, 1961). However, this assumption had been considered to be rather a "measure of ignorance". (Abramovitz, 1956: 11).

The Cyclical Linear theory encompasses the conflict-oriented theories. Hegel was probably the first European writer to give conflict a central focus in his theory. His principle of the dialectic - where all change is seen as result of thesis, antithesis and synthesis - was later developed by Marx whose thinking has greatly influenced present-day neo-Marxist development thought. Notable among the Neo-Marxist theories, are Liberation Theory championed by the Latin American educationist Paulo Freire and Dependency Theory whose first exponent was another Latin American, Raul Presbisch(1964).

Dependency Theory assumes an inverse relationship between development and underdevelopment within societies, so that the one develops at the expense of the other. Andre GunderFrank is noted for his sytematisation and dissemination of dependency theory through his study and writings about development problems in Latin America in the late 1950s and 1960s. He elaborated the centre and

periphery concepts of dependency. Dependency theorists base their argument on a historical dimension, and usually point out that the vast majority of Third World countries were so manipulated by colonial powers that the socio-economic development of the former were distorted in favour of the economies of the metropolitan countries. Thus, the economic resources of the poor countries at the periphery were expropriated for the comfort of the rich nations at the centre, just as the poor peasant farmers and the poor workers in the urban areas were being exploited by their elitist compatriots who had emerged and were being sustained in office by the colonial powers (Watson, 1984). Thus, dependency theorists saw modernisation and growth theory as a window dressing aimed at propagating the exploitation of the periphery by the centre.

Criticisms against dependency theory have been numerous because of its focus on the effects of exogenous factors influencing development to the neglect of the effects of endogenous factors. Also in its early formulation by Frank (1967), dependency was supposed to occur within a capitalist system. However, neither during the colonisation by the Spanish and the Portuguese nor the present time is it easy to describe the agricultural economy of Latin America as a capitalist mode of production. There is therefore confusion in the theory concerning the two concepts "capitalist mode of production" and "participation in a world of capitalist economic systems" (Booth, 1975). Other criticisms are based on the results of studies which suggest that foreign investment, trade and aid to a given country, at least in the short term, contribute to economic growth in that country (Bonschier

et al, 1978). A corollary to this argument is that "some dependent nations have succeeded to become rich while others have remained poor". Also, as noted by Fägerlind and Saha (1989), dependency theorists have failed to explain the role of socialist countries like the former Soviet Union in the development of the poor countries. In particular, they would like to know the extent to which such socialist countries promote their own form of dependency and underdevelopment in the developing countries.

Moreover, these writers have argued that since the severance of trade relations, the refusal of international aid or the nationalisation of multinational corporations are unlikely to stamp out dependency or promote economic growth, dependency theory does not seem to have a viable strategy for development that precludes dependency in the poor country. The interdependent world of today suggests that it is unrealistic of any nation to strive for complete self-sufficiency and autonomy. Thus, dependency is inevitable, so that dependency theory should have provided guide-lines about the kind of dependency and the kind of development. Such guide-lines have not been forthcoming. Finally, it is further argued that dependency theorists have not explained how the national elite of a poor country who are considered as collaborators with the elite of rich countries can be made to sacrifice their self-interests for the interests of their society as a whole.

Liberation theories do not reject Marxist and dependency perspectives; they offer an alternative focus with regard to the source of underdevelopment and how to

overcome it. Liberation theories are not systematic theories of development; they merely represent attempts at specific ways by which some aspects of development may be achieved. The underlying assumption of any liberation theory is that the power holders within underdeveloped societies oppress the rest of the society, through the former's monopoly over economic resources such as land, industry and wealth. Some liberation theorists believe that the way to free the oppressed is to educate them to be aware of their condition (Freire, 1972). Thus, education was considered crucial in the development process; it was the means to liberation which *is* development (Curle, 1973).

Liberation theory has been criticised as being utopian with regard to education as an agent of social change (Paulston, 1977). It is further argued that liberation can serve any political position; it can mean oppression to a new master, so that it does not necessarily resolve the problems of development (Fägerlind and Saha, 1989).

From the discussion of the various theories upon which present-day development theories are based, one can discern that societies can change consistently in a direction generally regarded as desirable. Thus, development is directed at a social system, comprising both economic and non-economic factors such as health, and education, and other related attributes such as equality of opportunity, political freedom and civil liberties (Myrdal, n.d.; World Bank, 1991). In the present work, therefore, development means, in Curle's words:

> Safety, in that the society is generally non-violent, and that individuals are protected from victimization by the state, or the police or each other;

> Sufficiency, in that they have enough food, clothing and other material things so that they are not prevented from making the full use of their potential; Satisfaction, in that sufficiency is not achieved at the cost of psychological and cultural disruption and disturbances; Stimulus; in that he people are kept aware of their potentiality, and are encouraged to fulfill it (Curle, 1973; 118-119)

This definition has attributes that a useful programme of educational reform for development should expect to deliver. Whether the Ghanaian reforms will deliver these attributes is the concern of the present study.

1.3 Economic Growth Concept of Development

Generally, the concept of development has both economic and noneconomic connotations. However in determining the level of development of a country, economists usually consider an increase in the income per head (economic growth) as a good proxy for the attributes of development. While there may have been an over-emphasis on the use of income growth as a welfare indicator, some people feel that there is no danger, since increase in per capita income does not militate against an economy's success in other dimensions of development (World Bank, 1991). In fact, some noneconomic components of development tend to be associated with economic growth, though lines of causation are generally not obvious. The works of Gastil (1989) and Humana (World Bank, 1991) show high correlations between economic growth and political and civil liberties. Also, strong relations between income growth, education levels, and declines in infant mortality have been reported (World Bank, 1991: 50).

Although regression results do not go so far as to suggest that liberties contribute positively to income growth, liberties do not hold back growth either. Grier and Tullock (1989) have found the relationship between liberties and economic growth ambiguous; but Dasgupta (1990) appears to be confident that "political and civil rights are positively and significantly correlated with real national income per head and its growth" (quoted in World Bank, 1991: 50). Thus, economic growth, measured by the rise in per capita income, has continued to be a useful proxy for overall development.

However, economic growth and economic development are conceptually different and some writers think that they should also be kept separate. Such writers often point out, rightly, that economic development means much more than a rise in national or per capita income or product. Gillis *et al* (1987) in their bid to show why the difference should always be kept in view have stated that:

> If the production of goods and services in a nation rises, by whatever means, one can speak of that rise as economic growth (Gillis *et al*, 1987: 7).

The issue here is that there may be growth without structural change; and so one cannot then talk of development under such circumstances. In 1962, U Thant, then Secretary General of the UN, expressed the same idea when he stated that development is

> ...growth plus change; change in turn, is social and cultural as well as economic; and qualitative as well as quantitative.

Also, Brandt has stressed that:

> one must avoid the persistent confusion of growth with development and we strongly emphasise that the prime objective is to lead to self fulfilment and creative partnership in the use of the nation's forces and its full human potential...After all, the technical and economic development process in the North has not yet come to an end and there is fierce discussion about how to progress from here - with different technologies, with a less wasteful way of life.Ideologies of growth in the North have had too little concern for the quality of growth. (Brandt 1981: 24).

These excerpts suggest that it is misleading to equate growth to development, for this loses the importance of the change that is implicit in the concept of development.

Moreover, there are some obvious weaknesses in using income growth as an indicator of overall development. Perhaps the major weakness is the inability of income growth per head to show clearly the real changes in welfare for a large proportion of the poor population. Statistics on income growth hardly capture movements in meeting basic needs for food, education, health, human rights, etc. Therefore, rather than risk the loss of certain vital pieces of information by positing income growth per head as level of development, a long list of both economic and social indicators is sometimes used (see Chodak, 1973: 214). However, no matter the spectacles with which one views decelopment, most Western societies have histories of steady economic growth and increased productivity.

The importance of economic growth in overall development has been accepted by policy-makers in most developing countries. But the different circumstances in these countries usually dictate where priorities must go. For example, India decided to tackle poverty directly because poverty was her greatest problem. So extreme was the poverty that she assumed that income growth would not be experienced by the poor. On the other hand, in 1973 Malaysia placed emphasis on rapid income growth as spelt out in her policy documents (see World Bank, 1991: 32).

Today, policy makers understand that rapid economic growth is hardly realised "without any particular group in (a particular) society experiencing any loss or feeling any sense of deprivation". Developing countries going through structural adjustment programmes aimed at stimulating growth know only too well that there are social costs involved in the pursuit of growth. Savings have to be mobilised and invested. These acts call for sacrifice; in most cases, sacrifice that is severe enough to make the mass of the people feel a sense of deprivation.

Consequently, what policy makers in present-day developing countries seek is not just increase in Gross National Product (GNP) per head (economic growth), nor indeed improvement in any one dimension of development alone. Rather, they want to improve as many elements of development as they possibly can. Many of these elements are correlated with income per head though the correlation is not perfect.

1.4 The Structuralist Conception of Development

Like the concept of development, the concepts of structure and structural change have been given several meanings, some of which are vague (Machlup, 1963). It is therefore important to specify the sense in which "structure" and "structural change" are used in this study, as means of explaining development.

In economic history structure often refers to the relative importance of sectors in the economy in terms of production and use. Thus, industrialisation becomes the hub around which the process of structural change revolves. In this sense, the structure of an economy means the output composition. It also applies to other aggregates that have some bearing on the process of industrialisation, such as demand and trade (Kuznets, 1959: 162).

In some cases, structure also refers to ratios derived from technological relations, such as input-output coefficients or behavioural relations such as aggregate saving ratio (Syrquin, 1988). The areas of emphasis regarding structural change have been on the rates of accumulation (Rostow, 1960; Lewis, 1954); shifts in sectoral composition of economic activity with initial focus on the allocation of employment (Fisher, 1935, 1939; and Clark, 1940) and on production and factor use in general (Kuznets, 1956-67, 1973; Chenery, 1960). Also emphasised have been the degree of urbanisation and related aspects such as demographic transition and income distribution (Syrquin, 1988).

As economic development occurs, structural change follows as a chain of interrelated processes. These interrelated processes are referred to as structural transformation.

Here, structure is used in the manner of Chenery (1986), where the focus is on "the accumulation of physical and human capital and shifts in the composition of demand, trade, production, and employment". Nevertheless, the related socio-economic processes are kept in view, but are treated as peripheral.

Structural change is considered the *live-wire* of modern economic growth and is crucial for describing the development process. The literature indicates that most scholars recognise the interrelationship between growth and structural change. For example, Kuznets feels that

> ***some*** structural changes, not only in economic but also in social institutions and beliefs, are required, without which modern economic growth would be impossible (Kuznets, 1971: 348, his emphasis).

For Chenery, economic development "(is) a set of interrelated changes in the structure of an economy that are required for its growth" (Chenery, 1979: xvi). Abramovitz, on his part, sees the interrelationship as a cumulative process; he sees the sectoral redistribution of output and employment as "both a necessary and a concomitant of productivity growth" (Abramovitz, 1983: 85). Matthews and others feel that:

> Neither structural change nor growth in GDP is an exogenous variable; both result from a complex of interacting causes on the supply side and the demand side (Matthews, Feintein and Odling-Smee, 1982: 250).

These views are consistent with the interventionist strategies being employed in many developing countries to stimulate and sustain economic growth. The ability to effect the structural changes largely depends on how well prepared the chief actors in the transformation process are. These actors are the work force who need appropriate education to ensure the required transformation. To this end the role of education cannot be over-emphasised. And such education invariably has to be organised to meet the requirements of the process of the transformation. The present study is interested in assessing the potential of a manipulated educational system in effecting structural transformation.

The incidence of disequilibria in developing economies is also an issue that educational reforms seek to address. When there is a continuous inequality of factor returns across sectors of the economy, the reallocation of resources to sectors of higher productivity contributes to growth. When such a disequilibrium occurs, structural change can be a great source of growth if it induces fuller or better utilisation of resources. This is important for economies of developing countries, given their pronounced signs of disequilibrium (Syrquin, 1988). It is equally important for the present study, for the extent to which educational reform can result in an efficient reallocation of resources is an index to its potential as an engine of development.

Therefore, the structuralist approach to development is of interest to the present study. At the analytic end, the study has benefited from a comparison of the role

of education in transforming the various sectors of certain countries with success stories. And at the prescriptive end, the study would identify the types of policies that facilitate or hinder the mobility of labour; and the coordination of changes in demand, trade, production and primary inputs to prevent bottlenecks from arising. Educational reform would have prospects if it is seen to be directing change and providing the necessary motivation for a vibrant market. In that case the reform would be said to be a vehicle for development. At the centre of all this, however, is the tacit assumption that education does indeed contribute to development - or does it? This is the subject matter of the next section.

1.5 Approaches to Development and the Role of Education

Today, it is clear that education is a profitable investment since the best jobs go to the more educated. Indeed, the idea that education is important was recognised long ago. Adam Smith (1776) mooted the idea when he likened an educated man to an expensive machine. However, reference to humans as capital appeared to Alfred Marshall (1890) to be in bad taste. Thus, economists ridiculed the idea of human capital until during the late 1950s. But after the Second World War education was recognised as a human right and UNESCO began to urge members of the UNO to provide free and compulsory primary education in accordance with the 1948 Declaration of Human Rights. Meanwhile, general development theory was in a state of flux. There was the prevailing assumption that the colonial dependencies had to follow the same industrial path as had the more developed nations. It was further assumed that the dependencies possessed a real advantage

in that their late modernisation would permit them to avoid the mistakes made by those countries that were already developed. Moreover, it was assumed that the developing countries could take short cuts by borrowing technology from the developed nations. Besides, it was thought that what the dependencies lacked was sufficient physical capital; so that if physical capital was provided, along with existing technology from the advanced countries, development would follow as a matter of course. Rostow (1960) accordingly hypothesised that developing countries would require massive aid in order to reach the point of economic "take-off". He postulated five linear stages of development which all societies must pass through in order to reach full economic maturity. These stages are:

1. the traditional stage;
2. the stage of preconditions for economic take-off;
3. the take-off;
4. the drive to maturity, and
5. the stage of high consumption.

By Rostow's imagination, the take-off was attainable when necessary infrastructure of power and communications had been established, and impediments to growth such as political opposition and value systems inimical to progress had been uprooted. Other preconditions were access to and exploitation of available science and technology and the acquisition of values which would predispose the society itself to desire change. A developing country was also expected to be able to invest from its own resources 10 per cent of its national income. Education was arguably an important factor in the march towards meeting these preconditions.

Rostow's stage theory had merit because it was simple. But the experience of the 1950s tended to suggest that the take-off point was a mirage; it could not be so easily achieved as had been thought. It was also apparent that making available material per se would not be sufficient for the purpose of propelling a nation into self-sustaining progress. Refinements of the growth model, such as the Harrod-Domar Model - with emphasis on savings and investment as main variables of economic growth - called for even larger doses of physical capital through aid programmes, and for changes in attitudes and behaviours both at the micro and macro levels. At this point, therefore, attention was largely shifted to the mobilisation of human resources.

The theoretical framework largely responsible for this shift in attention was provided by economists such as Schultz (1961), Denison (1962), and Becker (1964) in the so-called Human Capital Theory. The basic assumption of human capital theory is that formal education is highly instrumental and even crucial in improving the productive capacity of a population.

1.6 Returns to Investment in Human Capital

Human capital theorists have identified two pre-requisites for any economic growth and development to occur:

i) the improvement and greater efficiency of technology,' because higher technology results in greater production; and
ii) the utilisation of human resources in the application of technology, an act which demands the imparting of skills and the provision of motivation which, in turn, are the prerogatives of formal education.

Consistent with these prerequisites, human capital theorists believe that an investment in education is an investment in the productivity of the population. The prerequisites, too, were consistent with late 1950s and early 60s economic thought when the qualitative aspects of labour was stressed, unlike in earlier periods when labour was considered only in quantitative terms and as a somewhat homogeneous input.

The economic thinking stemmed from historical evidence derived from studies of more advanced countries, notably the United States of America, Denmark, the former Soviet Union and Japan. Data from these countries suggested that there had been a very significant relationship between their economic growth and the amounts and kinds of education provided to their workforces. A number of studies established correlation between the increase in national expenditure on education and increase in GNP (Harbison and Myers, 1964). Other studies involving economic growth and the measurement of factor inputs such as physical capital and man-hours of labour left much of the growth unaccounted for (Schultz, 1963; Denison, 1962, 1967; Kueger, 1968). It was then felt that there was a residual factor that would explain the unexplained portion of growth. This residual was generally accepted as involving organisational improvement and human characteristics such as health status, morale and level of education of the workforce. However, it was not easy to identify the specific components of the residual and to measure their respective contributions. Because of these uncertainties associated with the residual in human capital analysis, some

economists thought that it was more of a "measure of ignorance" rather than a representation of the improvement in labour quality. However, the problems are methodological problems (Blaug, 1976) and more recent studies are improving the power of the human capital theory (Psacharopoulos, 1981; World Bank, 1980; Lau, Jamison and Louat, 1990; Glewwe, 1991).

Since the 1970s, consistent patterns have been established between levels of education and levels of economic development among countries. Harbison (1973) showed that school enrolment ratios at all levels of the educational ladder are considerably lower for the less advanced countries than for the advanced. Despite the difficulties involved in using education to bring about development, he maintained that education remained a major component in the development of human resources. Schultz (1980), in his 1979 Nobel Lecture, declared his confidence in the theory by asserting that:

> a fundamental proposition documented by much recent research is that an integral part of the modernization of the economies of high and low-income countries is the decline of economic importance of farmland and a rise in that of human capital skills and knowledge (p.642).

He substantiated this with the observation that:

> corn acreage harvested in the United States in 1979 was 33 million acres less than in 1932. Yet the 7.76 billion produced in 1979 was almost three times the amount produced in 1932 (p.642).

Shultz declared that "education accounts for much of the improvements in population quality" (p.647). Earlier, Griliches (1964) had reported that education was an important determinant of agricultural productivity in the USA, and

Hayami and Ruttan (1970) reported a similar finding from studies across countries. Lockheed *et al* (1980) reported a relationship between farmer education and agricultural productivity in low-income countries. The study was extended by Jamison and Lau (1982) using 37 sets of farm level data that allowed estimation of the effect of farmer education on profits or output, after controlling for other variables. Averaging effects of education showed that productivity of farmers was on average 8.7 per cent greater if they had completed 4 years primary schooling (threshold level) compared with none. Using more refined calculations which permitted further analyses of primary data sampled from Malaysia, Thailand and South Korea, Jamison and his colleague found that a year of schooling was on average associated with a net increment to farm product of 5.1 for Malaysia, 2.8 for Thailand, and 2.3 for South Korea. When social returns to schooling were calculated for the 1970s under various working assumptions, they were found to be between 25-40 per cent, 25 per cent, and 7-11 per cent in Malaysia, Thailand and South Korea, respectively .

There have also been many studies that show interactions with returns to education. For example, Barrera (1986) examined child height and height-for-weight as measures of child health and nutritional status in the Bicol region of Phillipines. He found that gains associated with mothers' education were larger in communities that lacked health infrastructure. In the US and in Taiwan T. P. Shultz (1971), and Rosenzweig and Schultz (1985) found that schooling of couples and local family planning extension activity are substitutes in their effect

on fertility reduction. Other studies show that child mortality is lower for more educated mothers whether or not family income or husband's wages and education are also held constant (Cochrane *et al*, 1980; T. P. Schultz, 1980). In low-income countries, an additional year of schooling for mothers is associated with 5-10 per cent reduction in child mortality, even if more educated women tend to reallocate their home time toward market activities (Cochrane *et al*, 1980).

Despite the catalogue of dividends that education is supposed to have yielded or is capable of yielding, there remain some reservations about its role in the development process. In classical times, schools were not considered as being related to economic advancement. It has been argued, for instance, that the Industrial Revolution in England was carried through without the aid of universal education (Hobsbawm, 1977; Thompson, 1981). Some people even felt that schooling was inimical to the economy's performance. For example, one critic is quoted as saying that:

> Going to School in comparison to Working is Idleness, and the longer boys continue in this easy sort of life, the more unfit they will be when grown up for downright Labour, both as to Strength and Inclination (cited in Shipman, 1971:104; Fägerlind and Saha, 1989: 37).

Marrou (1956) expressed a similar idea about Greek and Roman Education. Besides, there were and are still others who believe that it is social transformation or development that precedes education but not the other way round (Cohen, 1970; Kneller, 1965; Durkheim, 1977). It is noted, for instance, that as late as 1959 the workforce of the former Soviet Union had an average of four years of

schooling. In other words, the Soviet Union was already a major industrial power before education became available to the masses of the people. Regarding Japan, the critics argue that the success of Japanese modernisation may largely be attributed to very favourable conditions that Japanese agriculture enjoyed in the later part of the nineteenth century (see Thompson, 1981).

These nagging scepticisms, together with the methodological problems concerning the measurement of education's share of the gain in productivity, made some people doubt the authenticity of human capital theory as a powerful theory. For example, the September 1971 World Bank Report stated that:

> Not only is (education) not directly revenue producing; in the present state of our knowledge its economic return is not accurately measurable

Despite the weaknesses of human capital theory, the expansion of education continued. The parallel sociological theory of modernisation appeared viable for Third World development and so the education systems have continued to expand, with renewed support from the World Bank (Psacharopoulos, 1986). The contribution of literacy and education to the improvement of individual and collective productivity and individual incomes, as well as to overall development is substantial. Without attributing any absolute value to the figures and percentages that researchers have assembled, the significance of the figures as trend indicators are undeniable (Tanguiane, 1990). These trends vary from country to country, thus begging the following questions: Why are the trends more consistent in some developing countries than in others? Has education played a

part in ensuring this consistency in the trends of variables? What has been the manner of educational organisation and delivery in typical developing countries. These are the principal issues that the next chapter will address, using examples from two developed countries and eleven developing countries.

1.7 Summary

This chapter traces the evolution of development thought from the earliest times to the present day, culminating in a definition of the term "development". The economic growth and structuralist conceptions of development are discussed and the role of education in development approaches based on these notions of development is highlighted. The chapter closes with a brief critique on the returns to investment in human capital

CHAPTER 2

SOME CASES OF EDUCATIONAL REFORM EFFORTS IN RETROSPECT

2.1 Overview

In the 1970s, there was some scepticism about public policies aimed at promoting greater social equality. This attitude stemmed from social science research conducted in the United States. For example, Jencks *et al* (1973) concluded that cognitive inequality could not be reduced through school reform; neither could reform bring about social changes.

Also, Hauser *et al* (1975) argued that expanded educational opportunities had done little to equalise social opportunities. The contribution of education to socio-economic development was being challenged. Thus, Ward (1974) asserted that "the systems of education now to be found in the developing countries still resemble those that preceded them. ***They have expanded more than they have changed***" (cited in Fägerlind and Saha, 1989:53, emphasis theirs).

Nonetheless, one cannot deny that countries with a long-standing commitment to education have the most advanced economies today. Therefore, given appropriate conditions, educational systems can produce both the needed manpower and egalitarian outcomes in young people who, later, can fight for egalitarian change to ensure both social and economic development.

The experiences of Japan and Sweden do show such long-standing commitment to education. Consequently, they are used to illuminate the present study as interesting examples of the power of education for economic and social transformation.

A review of the experiences of these countries is preceded by an examination of some theoretical issues in educational reform. Lessons from the experiences of these countries are drawn and examples of good practice are highlighted. Then cases of educational reform in China, India, Malaysia, Cuba, Brazil, Chile, Nigeria, Tanzania Zambia and Zimbabwe are reviewed. Lessons are drawn from each case and emerging themes that characterise areas of success and of failure are noted with a view to establishing paradigms that will inform an exploratory study of Ghana's ongoing educational reform.

2.2 Theoretical Issues in Educational Reform

Rival development theories have influenced educational reform and the nature of any particular educational reform can be explained, at least partially, by the theory of change or the theory of education and development characteristic of a given society (Paulston, 1977).

The preconditions for educational reform which determine what strategies to adopt in a reform process often reflect the philosophy of the society. The reformers expect the products of the reform to solve certain problems that bother the society.

Thus, evolutionary and neo-evolutionary theorists see a need for educational reform when the education system no longer adequately meets the needs of society as it moves towards a new stage of social or economic development. A relevant strategy for reform in this case is to adapt education to fit the needs of society through curricular changes, increased participation and specialisation. The success of this strategy is gauged by the extent of the adaptation and the congruence between education and other societal institutions.

Modernisation theorists consider educational reform imminent when pre-modern values, attitudes and beliefs are seen to obstruct social and technological development. Their reform strategy involves the expansion of a modern educational system, including high participation rates and the implementation of a standard curriculum to promote future social development. Thus, they expect to create modern individuals able to cope with the demands of rapid social change and the needs of modern institutions.

When dependency theorists observe a predominance of economic, social and cultural dependency, and a preponderance of dependent institutions and dependant psychology coupled with the production by schools of ***lumpenbourgeoisie***, they introduce educational reform. Their strategies include educational and curricular reforms that stress such virtues as nationalism and self-reliance, and appropriate technology. The success of such strategies is judged by the extent to which individuals are committed to national development, and have appropriate

technical skills for the development of the society (Fägerlind and Saha, 1989). Similarly, Marxist-Socialist theorists introduce educational reform when they are convinced that the educational system is subordinate to the needs of capitalism, supported by a docile, ignorant workforce. A typical reform strategy in such a situation involves the design of an education system that upholds systematic conscientisation of working people to convince them about the need for structural change and to prepare them for participatory democracy. The strategy is considered successful if it produces the "socialist man", eliminates educational and social privilege and creates an egalitarian society.

The attempt to marry theory and reform brings out differences between the basic principles of different theories. For example, as Fägerlind and Saha (1989) have pointed out, if development strategy is modelled on Western-type modernisation, then the educational reform strategy will aim at building institutions based on Western institutional models and technologies. Mass schooling in this case is regarded as a way of stimulating the society's progress through the collective efforts of committed, competent individual citizens in the political, economic and technical fields (Boli, 1989; Fägerlind and Saha, 1989). In contrast, a new socialist state which opts for a more Marxist or neo-Marxist development strategy will adopt an educational reform policy directed toward the structuring of the school system so as to make the school relations correspond to the social relations of production in the new social structure. As happened in Mao Zedong's China

and in Julius Nyerere's Tanzania, some of the reform measures will seek to eliminate privilege and elitism in the school system and in the society, too.

However, every educational reform programme tends to emphasise the democratisation of education, the modernisation of education with due regard to cultural identity, and the links between education and productive work (UNESCO, 1979:29). It is in the choice of approach to the realisation of these goals that ideological differences become evident. Consequently, there are, broadly, three schools of thought concerning the approaches to democratisation of education, namely, the conservative school, the liberal school and the radical school.

The conservative school takes its roots from the evolutionary and neo-evolutionary theories of development. The conservatives believe that school filters students based on merit which is determined through examinations. Thus, the "more able (students) are selected through educational Darwinism for elite occupations" (Spaulding, 1988:6). Spaulding argued that this meritocratic approach to providing education is undesirable because it is a device used by the elite to give the children of the rest of society the impression that they have had a chance. Spaulding further noted that where policy makers are sensitive to public criticism against excessive meritocratic policy, they try to handle the selection in such a way as to neutralise the impact of environmental factors on the chances of disadvantaged students by, say, promoting a certain percentage of primary pupils

in each primary school to secondary school irrespective of the relative achievement standards between individual primary schools. Thus, the same percentage of primary pupils from both rural and urban schools proceed to secondary school.

But such an effort at making attendance at secondary school more representative of the entire children population in the country is also often criticised by a section of the adult population as discrimination against 'bright' students in urban areas who cannot proceed to secondary school even though they do better in the selection examination than some of the rural children who are admitted. A complication, identified by Spaulding (1988), that tends to strengthen the case for the critics is the failure of the policy makers to admit that ***de facto*** selection often takes place during the primary education cycle, when many more of the rural and disadvantaged children drop out. Moreover, the critics say that such discrimination against high-achieving urban and privileged children in favour of rural and disadvantaged children so as to make secondary education accessible to a more representative group of children may simply be postponing the inevitable sieving process. For, eventually, when the "rural" students are matched against the urban ones from more intellectually stimulating backgrounds at the secondary level, the former will fare only second-best in competitive examinations. However, this latter point is doubtful. In Ghana, for example, it is known that the highest achievers in the nation-wide secondary entrance selection examination are not necessarily the highest achievers in the school certificate examinations.

The liberal or reformist school is neo-Marxist and believes in equality of access. Therefore it advocates that compensatory schemes should be instituted to give special attention to the children of vulnerable groups and to schools in the neglected or disadvantaged areas, while those filtered out through an inevitable selection process should be provided second-chance programmes. However, the conservative school doubts the impact of such efforts since the success of children in school or lack of it appears to be the result of many elements embedded in society and the family. Besides, the sceptics claim that the long-term impact of such schemes is uncertain. Nevertheless, McCormick (1988) has drawn attention to evidence that Japanese pupils compared to their English counterparts show a lower level of backwardness among the former's low attainers so that "the (Japanese) system must be seen as carrying a larger proportion of the age cohort to higher levels of achievement" (McCormick, 1988:44). Prais also argues that "the results must be attributed in no small measure to the quality of teaching and the effort put into teaching slower learners in a non-selective comprehensive system"(see McCormick, 1988: 44). Thus, there appears to be evidence that compensatory schemes directed at stimulating the cognitive powers of disadvantaged pupils do make a positive impact (cf. Jencks, 1973).

The radical school derives its principles from the dependency, cultural revitalisation, and anarchistic utopian theories. Its assumptions are:

(i) that the educational system reproduces structure of society, serving primarily as a sorting and certifying agency;
(ii) that intelligence is largely a cultural phenomenon influenced by private and public environments and can not be fairly measured by traditional psychometric approaches;

(iii) that apparent ability should not be a barrier to access (implying that) the system should adjust to suite the needs of all students;
(iv) that it is the responsibility of the state to ensure the maximum development of all students (Spaulding, 1988: 6).

By these assumptions, the radicals believe that students should be provided with equal preparation by the end of their schooling period so that they may have equal life chances. Therefore, the radicals advocate that elementary and secondary education should not be filtering devices. Also, they call for the provision of special help for disadvantaged groups.

The radicals' strategy for democratising education is problematic. As Spauding (1988:8) has noted, the key questions have always been whether it is equitable to give all students the same education or whether students should receive an education which is largely adapted to the economic and social needs of the regions where they live. In many developing countries, the expectations are that education should prepare a child for employment in the modern urban sector. For example, in order to find out how far education rated as "valuable" in comparison with other specialisms and options available in children, Blakemore (1975:242) asked householders in Ghana to indicate the kinds of work which they realistically expected all their male children eventually to engage in. The respondents, themselves farmers, would rather not have their educated sons do farming or, indeed, work at something else in the locality. The experience of the present writer among rural populations in Ghana suggests that these expectations have not changed despite the large army of unemployed and unemployable school leavers

roaming the streets of the urban areas in search of non-existent jobs. Spaulding (1988) associates this way of thinking with a kind of arrogance of educated elite which assumes that education is necessarily inferior "if it prepares children for anything other than an employment in the modern urban sector" (p.8).

However, the attitude of the elite in the developing countries regarding the provision of "relevance education" is, perhaps, understandable. The fact is that traditional occupations offer very little security. Agriculture is the predominant occupation of rural populations in these countries. And it is a high risk occupation which is vulnerable to uninsurable risks, such as drought and market imperfections. Few people want to bear such risks. This is confirmed by many studies conducted in Africa which show that educated individuals place a high premium on job security and show greater preference for employment by large firms rather than their own ventures. Also, they value stable jobs more than occupations with "high risks and potentially commensurate rewards"- such as farming (Clignet, 1980).

Basically, all the ideologies converge to two theoretical strands of educational reform which define options available to developing countries wanting to change their education system. One of these options is the technical (incrementalist) school theory. This theory stipulates that educational structures and processes are relatively independent of political and economic forces. Therefore, educational reform should wait till technological prerequisites are met. This school concerns

itself with issues such as efficiency. Thus, economic growth is central to its prerequisites. Consequently, the technical school advocates for educational programmes that will contribute to the growth in national output, even if such growth undermines social equality or democracy. This may mean, for example, greater application of investible funds in favour of early, minimal primary education and vocational training because they have greater social returns than secondary and higher education.

The other option is the structural school theory. This argues that an education system cannot be reformed without changes in the political and economic institutions. The structural school believes that educational reforms cannot precede a basic socio-economic transformation. The school focuses on the poorest members of the population because of the relative rigidity of the wage and employment structure and the role of the school system in preparing people for and rationing them to an hierarchical job structure. Moreover, structuralists dislike the dual system of education often proposed by the technical school - that is, minimal (about four years, say) public primary and vocational education for most; while reserving public and private secondary and higher education for the few. Instead, the structuralists propose changes in the distribution of income, restructuring of jobs and the actual process of work in life, and in the education system. They advocate a more democratic job process to make managerial functions available to a broad mass of the workforce. Furthermore, they demand a closer integration between schooling and working. Thus, they prescribe nine years

of universal primary with a heavy dose of practical experience including workshops to train children in skills related to job processes. Two or more years later, structuralists prefer to have secondary and higher education places filled by part-time students who also work part-time, so that further manpower development is tied to job requirements. These prescriptions may well be unworkable unless the educational reform is part of wide-ranging reforms involving economic as well as social structures.

What is certain is that whether an educational reform is influenced by the technical school or by the structuralist school, it normally involves a series of innovations encompassing initiation, development, implementation and evaluation of the outcomes. It is perhaps necessary to distinguish between an innovation and a reform. According to Marklund (1972):

> The term innovation as used in school and teaching is often synonymous with the term change. If this change is on a broad scale and affects an entire school system, one frequently speaks in terms of a reform. It would be incorrect to refer to every change as an innovation. It must imply an improvement towards predetermined objectives. Innovation always presupposes one or more qualitative criteria (quoted in OECD, 1973: 35-36).

Again, Dalin (1973) of the Centre for Research and Innovation (CERI) expressed the same idea more concisely by the statement that: "Innovation is a deliberate attempt to improve practice" (OECD, 1973: 36).

Thus, innovation implies something better than what it replaces. Dalin (1973) explains that "something better" certainly imlpies improvement for some group (such as students), but it may not alter conditions for others (e.g., teachers or even some other students) and may worsen conditions for other groups (say, parents, state financiers or other students). The implication of this is that the definition of innovation should include who has gained.

Educational reform implies major structural changes involving a political option and when considered in the context of the overall process of social transformation, it involves significant changes in general strategy. Decisions concerning educational reforms are the prerogative of national authorities or legislative bodies (UNESCO, 1979:11). Thus, an educational reform has broader connotations than an educational innovation; the latter is a subset of the former.

Many models have been suggested for different phases of the innovations that constitute reform processes (Havelock, 1969; Chin and Benne, 1969; Havelock and Huberman, 1977; Lewin and Stuart, 1991). A simplified typology of this proliferation of models is given in Lewin with Stuart (1991). The typology consists of six approaches that have distinct characteristics. These approaches are:

(a) systems;
(b) bureaucratic;
(c) scientific;
(d) problem-solving;
(e) diffusionist; and
(f) charismatic.

According to Lewin and Stuart (1991) a systems approach considers educational institutions as subsystems within a wider system that has specific goals. These goals are formally specified and are generated outside the education system. The generators of the goals may be political or otherwise and the innovators have the responsibility to design and implement programmes that will realise the goals. Educational systems and institutions must be overhauled to deliver outcomes commensurate with the society's changing needs. Innovation, then, is seen as a goal-directed process towards defined ends.

Lewin and Stuart (1991: 283-4) outline the distinctive nature of systems approaches as:

(i) the openness of the social systems within which educational innovation takes place;
(ii) the existence of goals identified by the systems which are shared by systems members;
(iii) the systematic pooling of efforts by subsystems to achieve the ultimate goals;and
(iv) the functional nature of specialisation which occurs in subsystems.

The main symptoms that call for the initiation of a systems-type innovation are the existence of a mismatch between input, throughput and output from the education enterprise, or when innovation is dictated by external conditions. The development of innovation is then based on rational-empiricism. It is executed step by step, each step being guided by logic, trial and feedback. Systematic structures are designed for the purpose and these provide the channels through which the implementation of the innovation occurs. Evaluation of a system-type

innovation involves finding out whether the response is adequate to ensure a balanced societal change and whether the mismatches have been removed.

Bureaucratic approaches are directed by goals identified at the system level. They tend to have static characteristics. Directive circulars, rules and regulations, agreed procedures and legal obligations feature prominently in identifying the need for bureaucratic-type innovation. These same arrangements provide the guidelines against which the innovation is judged. As things change, an appraisal may be made; but such appraisal is more administrative than educational.

For Lewin and Stuart (1991: 25), the key features of a bureaucratic approach are:

(i) the definition of goals by hierarchical organisational structures;
(ii) the delineation of individuals' roles in innovation by their positions in the organisation;
(iii) the conditioning of the interactions between organisation members by role cultures;
(iv) the tendency for information to flow down the system more easily than up it or access it from substructure to substructure;
(v) the deviation of power from position, expertise and control over resources;
(vi) the determination of actions by rules rather than judgement.

Lewin and Stuart explain that this approach is mostly initiated from the top of the organisational structure, drawing its legitimacy from the position of power of those who have the mandate. The process involves a sequence of delegated authority and functions according to rational, technocratic procedures without close consultation with client groups. Implementation of the innovation consists in

the dissemination of information and instructions according to laid-down procedure, and often tends to be power-coercive. The evaluation of the outcomes of the bureaucratic-type innovations is normally based on criteria sanctioned by the hierarchy.

Scientific approaches to innovation depend on research and evaluation of the needs of learners, the learning process and curriculum effectiveness as means of effecting change. Therefore the curriculum developer in the context of a scientific approach must undertake basic and applied research on teaching and learning to arrive at the more effective design of learning materials and curricula. Where more sophisticated models are involved, feedback is built into them so that formative experiments feature prominently and development is planned as a process of trial, evaluation and revision.

The important characteristics of a scientific approach to innovation, as outlined by Lewin and Stuart (1991:287) are:

(i) the existence of a rational, basically linear sequence to the innovation process;
(ii) the precedence of research and development over implementation;
(iii) the acceptance of division of labour in research and development tasks as both necessary and desirable;
(iv) the passive and rational nature of the consumers of the innovation; and
(v) high initial costs in money and time which are worth the long time benefits to quality, efficiency and viability.

Other innovations involve problem-solving. To use problem-solving techniques innovators must diagnose the problems experienced in an educational institution after establishing that there are problems. If the problems have already been recognised by individuals through their own practice, the problem-solver then has to diagnose the difficulty of the problems and search for solutions. He then offers the solutions to the organisation, or applies them to the individual's practice for trial and refinement.

Lewin and Stuart (1991) have pointed out that in a problem-solving approach, the innovator need not be a solution giver. He or she may be a process helper; an agent who offers suggestions and stimulates those who are suffering the problem to undertake an in-depth analysis of the problem in order to realise the need to take action aimed at solving it.

A problem-solving approach puts clients' needs first. The problem must first be carefully diagnosed and internal resources should be mobilised fully. The long run benefits of this approach lie in the tendency for self-initiated and self-applied innovations to have the greatest chances of success.

Diffusionist approaches to innovation emphasise the processes through which the innovations are disseminated and adopted. The assumptions of the diffusionist model are that:

> (i) behaviour is heavily influenced by the social networks to which actions are linked;

(ii) position in these networks is a good predictor of acceptance of innovation;
(iii) personal contracts are central to the spread of innovation; and
(iv) diffusion of new practices will follow an S-curve of growth with early adopters and laggards (Lewin and Stuart, 1991:289).

A sixth type of innovation is the charismatic approach. The beginning of a charismatic approach to innovation is a strong belief that is convincingly articulated by a person in a position of influence. Such as person - by dint of connection, force of personality, public relations, skills, refined mastery of the art of persuasion, and single-minded drive towards set goals - is able to generate development activity that reflects his educational philosophy. Here, the motivational force is conviction rather than research. The goals of the initiator of the innovation may not necessarily be those of the organisation for which he/she works. Usually the innovator wishes to replace the goals of the organisation with his own. Examples of such people include Mahatma Ghandi, Paulo Freire, Julius Nyerere, Kwame Nkrumah and Patrick van Rensburg. Their educational ideas have influenced many attempts to innovation in developing countries, and some proportion of that influence is said to have derived from their charisma (Lewin and Stuart, 1991).

2.3 Accounts of the Japanese and Swedish Experiences

2.3.1 The Experience of Japan

Meiji Japan's penchant for education was considerable. The restoration of the Meiji emperor in 1868 brought to power a technocratic government which

decided to import technology. Therefore this government sent missions abroad to learn science, technology and administration. Contemporaneously, extraordinary changes were made in the educational system. These changes were designed to:

(a) realise the spiritual training of the people so that they would be loyal, hardworking subjects of the emperor and not find Western liberal and hedonistic ideas too attractive;
(b) develop a technically competent labour force that would build a strong economy and nation; and
(c) select by meritocratic means the most intellectually able youth for positions of leadership in government and business (Cummings, 1982: 19).

By 1872, there was a broad base of compulsory primary schools and the foundation for secondary education had been laid. Primary school attendance grew from 30 per cent in 1873 to 90 per cent in 1907 and the number of secondary schools increased ten-fold during the period 1885-1915. In contrast, in the early days of the Meiji era, literacy was 15 per cent (World Bank, 1991). Students from the expanded primary level were channelled into different secondary-level streams, some of which were terminal, some led to vocational training, while others provided the background for university education.

At that stage of the educational reform process, three important outcomes are noteworthy:

(a) Japan attained a very high level of education-consciousness and became one of the world's most educated nations. Japan's unflinching commitment to education delivery is reflected in the fact that it has consistently spent a greater share of its real domestic product on education than any European or any other Asian country (World Bank, 1991)

(b) The literacy drive was arguably the propagating factor that facilitated the accumulation of technical skills to speed up the country's industrialisation after the Meiji Restoration.

(c) Two unexpected problems emerged as a result of the reform process, namely:(i) students became increasingly competitive in their efforts to enter the university stream, and (ii) graduates experienced difficulties in obtaining the jobs to which they aspired; in other words, there was an increasing problem of unfulfilled expectations.

The unexpected outcomes outlined above served as bases for another reform of the educational system after World War II, when the reform was aimed at ensuring an egalitarian transformation Japanese society. Accordingly, a Fundamental Law of Education (1946) was passed. This law stipulated that:

> Education shall aim at the full development of personality, striving for the rearing of the people, sound in mind and body, who shall love the truth and justice, esteem individual value, respect labour, and have a deep sense of responsibility, and can be imbued with an independent spirit, as builders of a peaceful state and society (quoted in Cummings, 1982: 19).

The proposals for the reform centred around democratisation and demilitarisation of the curriculum, replacement of the multi-track structure with a single track and decentralisation of the control of education. While the Japan Teachers' Union (***Nikkyoso***) identified with the "progressive" democratising and decentralising themes of the reform proposals, the conservative majority in the Japanese Parliament (***Diet***) resisted many of the new reforms and sought their replacement with traditional policies.

As part of the democratisation and decentralisation process, measures were taken to equalise schools and large school districts were created to ensure access to local tax sources which would help run the schools. Because of these measures, most categories of expenditures such as salaries, text books and lunches are, by law, paid for half-way depending on the amount of revenue that a particular district needs to meet the national standard. In trying to equalise schools, account is taken of the specific features of geography, population structure, industrial composition, the amount of tax revenues, etc.. Consequently, at the compulsory level, there is no variation between school districts in annual operating cost per student. There is also equality in distribution of essential equipment and teachers tend to have similar qualifications.

In order to sustain the drive towards egalitarianism, equalising measures are further directed at disadvantaged social groups, such as providing a subsidy for children from low-level income families for school lunches, excursions and other such regular activities and transport subsidies to enable children living in small islands to ride boats to mainland schools. Also, hardship salary supplement is paid to induce skilled teachers to teach in difficult environments.

Furthermore, additional funds are given to schools that receive children from the outcast ***burakumin*** community. Such additional funding is applied to paying for after-school tutoring and other compensatory programmes. Cummings has noted

that the intensity of compensatory programmes is so high that the expenditure per student outcast is approximately three times the expenditure of other children.

Great demands are made of Japanese teachers and their students because the curriculum is wide and is pursued in depth, too. Science is taught right from the first grade, mathematics is central and is claimed to move faster in Japanese schools than in US schools (Cummings, 1982). Despite the decentralisation that the reform permits, the curriculum is prescribed by the central government and its implementation is closely monitored through an inspectorate system. Commercial text books are scrutinised to ensure that they meet acceptable standards. For the Japanese child, school occupies a central place in a person's life: the school week consists of 6 days and the school year consists of 40 weeks. Thus Japanese children attend school for 240 days in a year as compared with 180 in the US. The teachers are generally committed to their job. They consider themselves as responsible for the entire school, not just individual classes. This encourages co-operation and team work towards achieving set goals.

Cummings (1982) attributes the conscientiousness of Japanese teachers to their job security and the respect that is accorded the teaching profession by the Japanese society. These, in addition to the reasonable remuneration that they receive, motivate the teachers to make teaching a life-long career. With automatic tenure extended to them on first appointment, they feel confident in running their schools without fear, and because they are committed to teaching for life, they

constantly strive to improve their professional competence. Cummings (1982) also praises Japanese teachers' belief in "whole-person" education. Thus, although they do respond to the concern of parents regarding their children's cognitive development, and the anxiety of examination competition, they feel that their principal task is to ensure a holistic development of students, not just to make them intellectuals. The teachers seek to make the children strong and healthy, inculcate in them the spirit of curiosity and intellectual achievement, encourage them to cultivate the will to endure in whatever is attempted, and to help each child understand how his strengths complement those of his classmates.

Cummings (1982) finds the teachers as conscientious in their handling of instruction in art, music, physical education and moral education as they do when the standard academic subjects are involved. He also points out that the official curriculum is couched in egalitarian and participatory themes. For example, by the time the child has gone through the first five years of schooling he/she has been properly oriented to realise the importance of each worker in the school and the family, to take interest in other people's work, to be aware of the need for environmental cleanliness and the associated activities in the public sector such as water supply, sewerage disposal and health protection, to be aware of widespread social problems such as pollution, poverty, bad health and the fact that individuals are expected to participate in solving them (thus encouraging careers in public service), to appreciate the relationship between agricultural production and people's lives (thus encouraging esteem for ordinary work). By the time the child

has completed lower secondary school, he/she gets training that predisposes him/her to respect human rights and individual dignity, to understand the relationship between freedom and rights with responsibilities and duties, as well as the superiority of democratic government to dictatorship.

Post-World War II Japanese educational reform yielded good dividends. Cummings (1982) recalls, for example, that in Pre-World War II Japan, social structure was exceptionally hierarchical and authoritative in the 1930s. However, by the mid-1970s, social structure had become more equal and participatory. Using income distribution as the most useful indicator of equality, Cummings drew on studies by Tadao Ishizaki (1967) and Andrea Boltho (1975) to show that throughout the mid-1950s, income inequality in Japan had been increasing. However, since then there has been a steady trend towards greater income equality. For example, in 1970, the Gini coefficient for personal income distribution among Japanese compared with nationals of other countries was as follows:

TABLE 2.1: MEASURES OF EGALITARIANISM COMPARED

Japan	.24
US	.40
UK	.40
Germany	.47
France	.52
Hungary	.26
Czechoslovakia	.24
Perfect equality	0

(Source: Cummings, 1982)

The Gini coefficient measures income inequality. Its values lie between zero, representing complete equality of incomes, and 1, representing complete

inequality. Thus, the higher the value of the coefficient (i.e. the closer to 1) the more unequal are incomes in the country under consideration. As a single summary statistic, the Gini coefficient has the advantage of facilitating international comparisons. Against this background, it is seen that 1970, save for socialist Czechoslovakia and Hungary, Japan was far ahead of all the major industrialised market economies as far as equality in income distribution was concerned. Again Ahluwalia's (1976) work and that of the World Bank (1985) showed Japan as still maintaining its lead in the equal distribution of income along with socialist Hungary (Czechoslovakia was not in the 1976 sample).

Although the stable international context and rapid economic growth are important in facilitating the egalitarian shift, Cummings (1982) emphasises that the most impressive covariant is the emergence of the new educational system whose rapid expansion in scale has openly promoted more equal and democratic orientations. Also, a greater proportion of Japanese children enter high school than children of any other contemporary society, and a greater proportion enter college, except when compared with the United States. Average educational attainment is high and the relative gains of children from farm and low-income backgrounds are greater than in the case of the privileged. Data provided by the International Association for the Evaluation of Achievement in Sciences and Mathematics show that by the end of primary school, the cognitive achievements of Japanese school children are more evenly distributed than in any other contemporary society. Furthermore, attitude surveys show that graduates of the reformed system have

much more egalitarian attitudes than their immediate post-war predecessors. For example, in a 1975 survey, graduates of the reformed system attributed less prestige to high-status and more prestige to low-status occupations (see Cummings 1982).

However, the effects of the Japanese educational reform are not just a catalogue of desirable outcomes. Based on the traditional assumption that lower schools can effectively select students, the elite and leaders succeeded in putting forward a differentiated academic curriculum for bright, university-bound students and a vocational curriculum for students considered less bright whose education is supposed to be terminal at the lower level. This arrangement allows only a fraction of places in upper secondary school and at post-secondary levels a state subsidy to make high quality education available to children of sufficient merit, incuding children of low income parents. As a corollary, majority of places at upper secondary and post secondary levels offer moderate to low quality education for a high fee. Thus, the upper level secondary and higher levels of education are less egalitarian. The result of this is that there is great anxiety among Japanese students. Failure by ambitious youths to gain access to the highly competitive high quality education provided by the few 'special' upper level secondary schools and the universities is often taken badly by these youths. Consequently, the problems of upper level educational provision frequently occasion such intense frustration among Japanese youth that the frustrated students commit suicide.

Overall, however, one can say that the positive effects of the Japanese educational reforms are evident in the social, economic, cultural and political contexts. The outcomes of the reforms also provide useful guidelines for understanding further the possibilities and limits of educational reform as a means of promoting the social and economic development of a nation. In particular, total commitment to the cause of education by the state, teachers and parents as exemplified in Japan is worthy of note. Central to this commitment is the importance of making adequate concessions to eliminate disparities in the delivery of education and student performance within and among schools and school districts. And, perhaps, it is necessary to reiterate that the extent of the teachers' preparedness to accept and effect change enhances the potential and prospects of educational reform in facilitating the development of a nation. Japanese teachers have demonstrated this clearly and educational reform in developing countries can benefit from the Japanese experience.

2.3. 2 The Experience of Sweden

Sweden provides another case that might interest countries seeking economic and societal development through educational reform. Swedish education has undergone a series of reforms. Consistent with the neo-evolutionary model, Sweden embarked on a literacy campaign motivated by religious considerations. The tenacity and vigour with which this campaign was undertaken ensured success, albeit after a long period of time. Also, based on modernisation theory, in the nineteenth century, there was a move towards compulsory education to

mobilise Sweden's human resources. In the twentieth century, another reform based on the Marxist-Socialist model was launched to provide comprehensive schooling as a means of eliminating inequality in Swedish society.

Each of these reforms brought unforeseen consequences which either had to be endured or utilised as basis for further educational reform (Fägerlind and Saha, 1989:165). This is a lesson that developing countries ought to learn - the need to make the best out of unforeseen consequences triggered off by educational reform. To abandon the reform process in the light of unforeseen consequences may be tantamount to throwing away the baby with the bath water. Furthermore, it is important to appreciate the fact that the effects of reforms do not occur overnight. In this regard, the conviction of decision-makers is crucial in the implementation of an educational reform package.

2.3. 3 Lessons from the Educational Reforms in Japan and Sweden

Neither in the case of Japan nor that of Sweden are any claims made, covertly or overtly, that education alone can change society. The rapid industrialisation in these two countries is not due to education alone (Fägerlind and Saha, 1989:105). However, combined with other reforms in other sectors of the society, education can make significant contribution to development. For example, Fägerlind and Saha (1989) attribute the success of the Swedish educational reform largely to the overall policies of the Swedish Parliament and the Church, which sought the reform of both education and other sectors of society as well. In Japan, too,

educational reform was supported by a collective will to ensure equitable distribution and a hardwork ethic that was cherished by the society.

Developing countries, therefore, have to be clear about the limitations of educational reform. Part of the apparent failure of education "as a viable development strategy which began to emerge in the early 1970s may have been due to the simple fact that education ***alone*** was expected to provide the development impetus" (Fägerlind and Saha, 1989: 166, their emphasis). On the other hand, to ignore education as an important variable in the development process is to make a mistake. To do so is to run the risk of losing not only a major potential support for development, but also of turning the non-reformed education system into a force opposed to reform in other sectors (see, for e.g., Carnoy ,1975: 370)

The cases of Japan and Sweden illustrate that when educational reforms are linked with reforms in other sectors of society as part of a consistent development policy, such reforms can provide the development impetus.

2.3.4 A Critique of the Japanese and Swedish Experiences

The educational reforms carried out by Japan and Sweden are characterised by elements of some of the approaches to innovation mentioned in the last section. In the case of Sweden, each of the several educational reforms show elements of at least one of the approaches discussed. For instance, the literacy campaign, which

was motivated mainly by religious considerations, can be classified under the evolutionary model. And the innovations that were inherent in this reform had characteristics of the systems approach because innovation in that case was initiated for the purpose of achieving universal literacy - a goal generated by the Church outside the educational system. Schools then had to be reformed to meet the changing needs of the society. Also, there were characteristics of the bureaucratic approach. The Church was at the top of the hierarchy and issuing directives to different strata of the society about the innovation. Implementation of the innovation was coercive and the curricula were centrally controlled. Thus, some characteristics of the bureaucratic approach are evident.

The Swedish educational reforms of the nineteenth century were also carried out through innovations that show elements of the bureaucratic and systems approaches as mentioned above. There was a general desire to mobilise Sweden's human resources and innovations were introduced to enable schools to respond to this desire, thus showing elements of the systems approach. Concurrently, Parliament and the Church controlled affairs regarding the innovation in the schools by issuing both administrative and curricular directives and enforcing the compliance of such directives. All of these acts illustrate the use of the bureaucratic approach.

Moreover, the twentieth century reform which aimed at establishing an egalitarian society had underlying theoretical assumptions akin to the Marxist-Socialist

model. The innovations involved in this reform had characteristics of the systems and bureaucratic approaches, though scientific approaches were also evident. The presence of elements of a systems approach is illustrated by the fact that various interest groups demanded changes in the formal educational system after World War II (Fägerlind and Saha, 1989:160). These requests were motivated by the importance the various subsystems attached to the production of democratic individuals. Evidence of the presence of elements of a bureaucratic approach is also shown by the existence of a hierarchy. This hierarchy had the School Commission with the Minister of Education as chairman. The Commission initiated innovation at the top and issued directives about the innovation which the different sections of the society had to comply with. Then there followed a period of research to evaluate the consequences of the innovation. And based on the research findings, new curricula were defined and developed, text books revised and teacher training provided. These activities showed the presence of both scientific and bureaucratic approaches.

In the case of Japan, both the earliest and the recent educational reforms involved innovations that show a predominance of bureaucratic approaches. Goal definition is the prerogative of a hierarchical organisational structure. Curricula are centrally planned and implementation is closely monitored by a central pool of supervisors who insist on compliance with laid-down directives and regulations. However, systems approaches are also implicit. The bases for these relate to the fact that there is the pervasive Confucian idea of learning for its own sake which

is a collective natural drive among Japanese to strengthen their country's international position. Moreover, Japanese society upholds a moral obligation to be good at their jobs (Dore and Sako, 1989). These considerations favour the generation of goals outside the school system which schools have had to be reformed to meet in order to satisfy societal demands. Thus, the presence of ingredients of systems approach are undeniable.

Japanese educational reforms have also involved innovations that used problem-solving approaches. Evidence of problem-solving approaches can be seen from the compensatory schemes that were provided to help disadvantaged Japanese children. The role of Japanese teachers in conducting research and seminars aimed at improving instruction within their own schools have made the teachers "reflexive practitioners" who are able to analyse their own problems and try out action to overcome them. These activities further exhibit elements of the problem-solving approach to innovation. Furthermore, Japanese teachers form a micro-network so that innovative ideas initiated in one school are easily disseminated and adopted by other schools. Thus, diffusionist approaches are also evident in Japan's educational reform processes.

Therefore, one can say that it is important to have an effective bureaucratic set-up to give direction to the initiation, development, implementation and evaluation of an educational reform. However, for the goals of the reform to be achieved and sustained, systems approaches are necessary, otherwise what goes on in the

schools may be irrelevant to the needs of the society or may even impede positive societal change and development. As Moberg (1979:168) puts it: "Educational changes must harmonise with changes in the labour market in urban and regional planning and in other sectors."

The successes of the Swedish and Japanese educational reforms have been acknowledged by scholars. Moberg (1979:168), reflecting on the Swedish experience, has this to say: "Both in economic and welfare terms, society has been able to progress fairly swiftly and equably, thanks in large part to a well-trained labour force." Thus, Swedish education is profitable.

Japan is among the great nations of the world. Several of the successes associated with its educational reforms have already been discussed in the present work and a repetition here is unnecessary. Moreover, a 1971 publication by the Ministry of Education of the Government of Japan, Prais (1987), Cummings (1982), McCormick (1988), and Dore and Sako (1989) all provide information about the successes of the Japanese reforms.

The next sections explore the educational experiences of developing countries and the extent to which these experiences differ from those of Japan and Sweden.

2.4 Cases of Educational Reform Efforts in selected Developing Countries

2.4.1 The Selected countries

The countries chosen for study as a precursor to the Ghanaian study include Nigeria, Tanzania, Zambia and Zimbabwe from the Africa Region; China, India, and Malaysia from Asia; Brazil, Cuba and Chile from Latin America, while Papua New Guinea represents the Caribbean and the Pacific.

The countries do not constitute a probability sample. The reasons for their choice are summarised in Table 2.2. Included are countries with different ideological leanings but no attempt was made to include equal numbers of countries of each ideological persuasion. Furthermore, the number of countries chosen was unrelated to the size of the regions in which they are situated.

TABLE 2.2: REASONS FOR CHOICE OF COUNTRIES INCLUDED IN STUDY

AFRICA REGION	REASONS FOR SELECTION
Nigeria	Nigeria embarked on a similar educational reform programme earlier and her experiences would make interesting comparison with the Ghanaian experience.
Tanzania	Vocationalisation of the curriculum is an important aspect of the reform programme being implemented in Ghana. Therefore lessons from Tanzania's experience with curriculum modelled on work-experience might provide ideas for assessing the prospects of the vocational aspect of the educational reform efforts in Ghana.
Zambia and Zimbabwe	These two countries are arguably the countries which have invested most heavily in education, which played an important role in legitimising political parties and governments (Graham-Brown, 1991) Their experiences would provide ideas about the finance and democratisation of education that might be useful for Ghana.

ASIA REGION

China

China's educational reform programmes simulate the World Bank model. It is therefore useful to assess the impact of the educational reforms on the socio-economic development of China and draw lessons for the Ghanaian case.

India

India provides interesting cases of resistance to efforts in educational reform and work experience, too. There are also examples of community participation that might provide lessons for Ghana.

Malaysia

Malaysia has experienced rapid growth with commendable trickle down effects. It was intended to find out the role of educational reform in the development process and determine whether any lessons could be drawn for Ghana.

THE PACIFIC and THE CARIBBEAN REGION

Papua New Guinea

Papua New Guinea has gone through an extremely rapid process of educational expansion. It has also been involved in projects aimed at providing an educational system that will provide skilled manpower for both the traditional and the modern sectors of the economy. It would be interesting to know whether these efforts had any potential to contribute to the overall development of the country so that appropriate lessons might be drawn for evaluating the Ghanaian educational projects.

LATIN AMERICA REGION

Cuba

Cuba is one Third World country that has a mature educational system. It has been successful in implementing two parallel systems of education as well as rural and urban secondary education curricula. Cuba's work study programmes have also been very successful. Ghana was one of the many developing countries that sent their children to Cuba to study. A study of Cuba's educational reform programmes will therefore be helpful in building a framework for assessing the prospects of the Ghanaian educational reform efforts.

Brazil

Brazil's post-war economic fortunes were enviable, particularly in the 1970s when it led the world in growth and it was thought to have reached the "take off". However, there is evidence that Brazil is no longer what it was felt to be in the 1970s. It was therefore considered useful to find out the strengths and weaknesses of its educational system over the past three decades and determine whether there were any implications that would be appropriate to Ghana.

Chile

The economy of Chile now shows much promise and it was considered interesting to find out whether educational reform has had any impact on its struggle to reach where it has reached today. It was intended to use Chile's experiences to serve as a second comparative case from the Latin America region in the search for a framework for assessing the prospects and potential of the Ghanaian educational reform.

2.4.2 Countries in Asia: the cases of China, India and Malaysia

No single regional scenario can be painted for Asia's wide-ranging and complex problems, issues and approaches to development. For, apart from locational differences, there are also great disparities in terms of population size, socio-political systems, stage and pattern of economic development, technological advancement and educational development. Nevertheless there are certain common problems associated with their educational policies which might be useful in assessing the prospects and potential of similar endeavours in other developing regions.

2.4.3 The Chinese Experience

Educational reforms in China in the 1950s and 60s were influenced by the red (politically active) and expert (acquisition of high skills) debate. While the Chinese Communist Party desired an individual to be both red and expert, there was no consensus regarding where the emphasis should go (Hawkins, 1982).

The year 1976 is considered a watershed in Chinese history and the critical educational reforms in China naturally frequently refer to that period (Yat-ming, 1991).

After the demise of Mao Zedong and the Gang of Four, new Chinese leadership abandoned the ultra-leftist policy of the "permanent revolution" to work towards achieving the four modernisations of China, namely the comprehensive

modernisation of agriculture, industry, national defence, and science and technology (see Yat-ming, 1991). Towards this end investment in education was increased in order to meet manpower requirements. The provision for education facilitated the maintenance of a proportional relationship between educational development and national development to be maintained (see Unesco, 1988: 23).

Curricular reforms were the bed-rock of the post 1976 educational and modernisation efforts. Deng directed the Ministry of Education to mobilise several hundred experts from different fields and let them update primary and secondary school text books, using imported text books from the UK, US, France, Germany and Japan as a guide. The purpose was to produce appropriate books that would enable Chinese pupils to master the most up-to-date scientific knowledge for the overall benefits of China according to the principle of "using foreign things to serve China" (Yat-ming, 1991:24). Thus, Yat-ming points out, post 1976 curriculum development in China was goal-directed. The rationale for this approach to curriculum development was that both loyalty and modernisation of the agrarian economy are crucial to a newly-founded sovereign state. The attainment of these ends requires the development of a national consciousness and a national identity, as well as scientific and technological know-how. Education was considered as the means by which these tasks could be accomplished (see Woodhouse, 1984). So efforts were intensified to provide purposeful education.

After several years of readjustments, interesting new developments occurred between 1984 and 1986 when educational reforms enjoyed steady progress.

Education became a key priority of the government at all levels. The adoption in 1985 of the "Communist Party of China Central Committee Resolution on the Reform in Educational system" was significant. Important, too, was the approval in April 1986 by the Fourth Session of the Sixth National People's Congress of "The Law of Compulsory Education of the People's Republic of China" and the Seventh Five-Year Plan (1986-90) for regional development, which contains a programme for education (Unesco, 1988:24).

The major policies of the Law include the shifting of responsibility for developing elementary education to local governments; the systematic introduction of nine-year elementary compulsory education; readjustment of the structure of secondary education; reform of relevant labour and personnel systems; emphasis placed on the development of vocational and technical education; reform of enrolment planning and graduate placement system in institutions of higher learning and granting of greater autonomy to these institutions to administer themselves; and the establishment of a State Education Commission to strengthen the government's leadership role and ensure the smooth implementation of the educational reform package.

The policy emphasises the need for every schooling at every level in China to be tied to the needs of the nation's modernisation drive to international competition and future development.

Also, the provinces, autonomous regions and municipalities are allowed to formulate educational measures relevant to their local economic and cultural conditions during the implementation of the nine-year compulsory schooling programme. Moreover, emphasis is placed on inter-departmental and inter-sectoral collaboration (Unesco, 1988).

In order to promote efficiency in administering the education system, provision is made for the training of educational administrators at each level. The Central Educational Administration Institute is responsible for training administrative personnel for the country's institutes of higher learning and for employees of educational departments at the provincial, autonomous regional, municipal and prefectural levels. The training needs of administrative personnel at the country level and in the primary and middle schools are met by provincial and prefectural colleges of education and at country-run teachers' training schools.

A Unesco (1988) report has noted that one important aspect of administrative reform aimed at mobilising funds for financing education since December 1984 has been the collection of supplementary education funds by local governments. By this arrangement, townships authorities collect supporting funds for education from local and agricultural enterprises and encourage various sectors and individuals to offer donations to rural education development. The funds are not levied according to population or farmland acreage; they are based on incomes from sales and other transaction. The methods of collection are said to be

democratic and account is taken of each particular township's economic situation in a particular year, local residents' ability to contribute, and the needs of the development for the education in that area.

The Seventh Five-Year Plan (1986-1990) for national and social development has as one of its most important principles, "to keep the development of science and education as a key national strategy, to promote scientific progress and to accelerate the development of technical know-how" (Unesco, 1988:27).

The Plan emphasises the prompt initiation and popularisation of primary education in cities, coastal areas and a few advanced inland districts where one quarter of China's population live. The education drive would thereafter be extended gradually to the other parts of the country. Furthermore, there is emphasis on the universalisation of junior middle school education, while striving for both quantity and quality, the latter implying curricular changes.

The attention given to curricular changes in 1976 was appropriate because curriculum change is considered to be the most crucial of the elements of any educational reform. Because of this importance of curricular change, it is essential to note the conditions of curriculum change. These conditions include "the potential and economic context, the ebb and flow of public opinion, which provide both a material frame and a social climate for curriculum change" (Yat-ming 1991:30, citing Ball, 1987). In the case of China, all types of policy changes

manifest the invocation of an official ideology as basis for a claim to legitimacy (Schram, 1984). Thus, in the mid-1970s, educational changes sparked off a controversy among political leaders. The struggle was between the neo-Maoists, led by Chinese Communist Party Chairman, Hua Guofeng, and pragmatic modernisers, led by Deng Xiaoping. The modernisers sought gradually to dismiss Mao Zedong's revolutionary model of education based on dogmatic Marxist 'superstructure' conception of education - whereby the primary role of education was to serve as a powerful tool for consolidating proletariat dictatorship by grooming citizens to be loyal to Mao Zedong thought.

The issue was settled with the redefinition of the function of education in China's national development after 1976, followed by the prosecution in 1977 of the Gang of Four (Mao's wife, Jiang Qing; Yao Wenyuang; Zang Chunzhiao; and Wang Hongwen) for ruining Chinese education and purging intellectuals. Deng Xiaoping embraced the manpower production strategy which had been strongly advocated by modernisation and human capital theorists since the 1960s. He believed that education was "the key to achieving modernisation of science and technology" (see Yat-ming, 1991:31). He therefore tried to use education to upgrade China's level of science and technology to facilitate the realisation of the country's four modernisations and the production of needed manpower. Moreover, Deng favoured the meritocratic examination system and keypoint school system as a means of producing capable manpower.

In Deng's opinion, excellence in a professional's chosen field was a better way to serve the revolution than through the study of piles of books on political theory, or spending valuable time and energy on activities unrelated to his/her work (see Yat-ming, 1991:31). Deng wished to open China to Western influences and so advocated better prestige and material rewards for a first class scientific elite that could establish a rapport with the international academic community aimed at carrying out technological transfer. By keeping China open to the West and providing incentives to the elite, Deng hoped to propel China into the circle of the leading nations of the world.

By 1980 a firm direction had been given to education as a vehicle for the advancement of the Chinese nation state. In April 1979 Science and technology was officially accepted as the key to modernisation and education as the foundation for the implementation of the Four Modernisations.

It was against this background that China officially enacted a compulsory education law in 1986, providing for a nine-year compulsory education system to be implemented over a ten-year span. The basic provisions of the law were to be implemented by the cities and developed areas by 1990, while the underdeveloped and rural areas were given up to 1995 to implement the provisions. The poorest areas of the country were expected to implement the provisions when possible.

It is curious that so much flexibility was expressed with reference to the eventual reconciliation of rural versus urban educational systems. What does "when possible" mean? Typically, rural primary schools educate children for five rather six years before the commencement of middle school. Thus, rural children receive only six years of combined compulsory education (Epstein, 1993). Moreover, the schools have been permitted to continue charging parents school fees, despite the enactment of a supposedly fee-free compulsory education law (Pepper, 1990:88-89). Furthermore, the initial targets envisaged in the provisions of the law have been extended to 1995 and 2000, respectively (see Epstein, 1993: 233).

The problems that have hindered the smooth implementation of the educational reforms of the 1980s appear to have stemmed from a confusion between ***implementation and adoption***. Fullan (1985) sees implementation as a referent concept which implies a process over time. By this process, events and resources determine whether or not there is a change in practice when something is new . Adoption, on the other hand, only represents a decision regarding the use of a new programme; it does not imply implementation. As a phenomenon, implementation is multi-dimensional and multilevel (Hall and Loucks, 1977, Leithwood, 1981, Yat-ming, 1991). Perfect implementation is considered to be unattainable since there is always an 'implementation gap' (Gunn, 1978). Internal attributes ('pre-conditions') pitched against external attributes ('co-conditions') pertaining to implementation make it possible for the factors that account for the acceptance or rejection of an educational innovation to be examined (Rogers and Shoemaker,

1971; Zaltman *et al*, 1973, Havelock and Huberman, 1977, Dalin, 1978, Adams and Chen, 1981).

Because of this confusion, the inevitable gap which always exists between the large scale, top-down curriculum development initiatives at the central level and the implementation outcomes at the grassroots of the school system remained wide. This is described as the "change without change" syndrome; a condition that has been recognised in countries other than China (Lewin, 1981; Crossley, 1984; Morris, 1985; Guthrie, 1986).

According to Yat-ming (1991), two factors have been identified as having undermined the achievement of the educational reforms. First, is the highly centralised political system, together with its strong element of personality cult (of Deng Xiaoping). This political arrangement resulted in a "power-coercive approach to curriculum innovation, resulting in a hurriedly produced academic and monolithic school curriculum that lacked flexibility and relevance to meet the wide variations in conditions in different parts of the country." Second, is the contentious nature of the curriculum innovation which led to educational objectives and strategies that were crucial for achieving modernisation goals via the curriculum being given different interpretations by different stakeholders. Thus, the redefinition of school subjects became a highly controversial issue. The situation triggered off a scramble for status and resources for competing subjects. Consequently, curricular change has been limited in its impact and has failed to be

guided by the realities of implementation in typical, rather than exceptional, school environments.

Moreover, Epstein (1993) has noted that apart from the lack of primary schools, in remote and isolated areas, other militating reasons include the inability of some parents to pay high tuition fees that primary schools charge in order to survive; and parents' perception of the value of retaining children in school - private economic returns are low, since attending school will not improve the children's "chances of moving permanently to a more affluent area." Thus, the incidence of rural drop-out appears to be most prevalent in poor villages and townships which share boundaries with richer villages and townships. However, Epstein, notes that there are parents in the poorest rural units who continue to invest in their children's education because there exists no other option by which they can greatly improve their chances for geographical and vertical mobility. On the other hand, rural areas with slightly higher productivity or areas that have richer peasants as their neighbours see greater promise in offering the labour of their children (Pepper, 1990: 89-92; Epstein, 1993:234).

2.4.4 Lessons from the Chinese Experience

Some aspects of the Chinese educational reform experiences illustrate the systems approaches to innovation, e.g. the highly organised, specialised and inter-related set of agencies charged with implementing change initiated in the political and ideological system. Also, the way new text books were produced and distributed

for use during the reform is a good illustration of the systems approach. However, since the early 1980s, there have been attempts at decentralisation which have weakened the systems approach and affected educational provision. For example, the replacement of the commune, brigade and production teams by the township as the prime local administrative unit has worsened funding problems for rural schools and for institutions that have no reliable, institutionalised and long-term funding mechanisms because the townships lack the necessary political authority to impose taxes and disburse revenues equitably (Pepper, 1990; Robinson, 1991; Epstein, 1993).

The reforms implemented during the period of the Cultural Revolution (1966-76) were based on the premises that if an educational system could be divorced from the competition for careers and if the threat of selection examinations were removed, students would learn whatever was useful in doing jobs that were most likely to be available to them. Unger (1984) has pointed out that China's experience does not appear to support this view. The students were interested in skills associated with prestigious jobs; they had scant regard for lessons on farming. The national political ideology that actively promoted the dignity of farmwork notwithstanding, the Chinese authorities could not convince urban students forced to go to the countryside to pay attention to learning agricultural skills at school. The literature shows that countries which have such schemes have run into the same problems. Examples can be drawn from the experiences of

Turkey and Mexico in the 1930s, India in the 1950s and Tanzania in the 1960s (Unger, 1984; Sinclair, 1980).

Unger (1984) feels that the defeat of the vocational programmes in the Third World countries in most cases can be traced to the attitude of personnel officers of these countries. Third World governments normally employ a large proportion of the country's modern sector personnel. Yet, recruitment officers in these countries tend to consider students who pursue vocational courses as less capable than those who go through general education courses and therefore tend to prefer the latter type of school leaver. So vocational students have no incentive to concentrate on their courses; they rather resort to rote-learning to pass the next higher regular-track entrance examinations. The Chinese experience indicates that vocational programmes can contribute to the economy if graduates of the programmes are channelled directly into reserved jobs. Between the 1950s and 60s, China was very successful in this regard. The vocational programmes however broke down during the intervention of the radicals.

Perhaps the greatest lesson to be learned from the Chinese experience, is that there is the need to strengthen the linkages between vocational training and job recruitment. As a corollary, curricular reforms that seek to discourage students from chasing diplomas must provide career inducements (Dore and Oxenham, 1984; Unger, 1984; Lewin, 1984). The establishment of training and recruitment linkages and the provision of career inducements may be facilitated through

educational reform that employs a good mix of the systems, bureaucratic and scientific approaches.

In the decade of the 1990s, thanks largely to economic growth, only 10 per cent of the people are living below subsistence level, and a 1993 World Bank Report forecast that poverty in the region could be all but wiped out within three decades (***Newsweek,*** March 1, 1993, p.32). China's economy grew by 12 per cent in 1992, leisure and private investment increased and the number of citizens living below the poverty line reduced from 275 million in 1970 to 100 million in 1990, even as population grew by 17 per cent over the period. Given these circumstances, there is the need to produce more people with firm educational background for the emerging skill-intensive industries. And if the bottlenecks in the current educational reform in China are removed, education will hasten social and economic development.

In judging China's performance regarding the implementation of her educational programmes, one must not lose sight of certain factors that tend to block even some well-intentioned moves in educational provision. For example, as Simmons (1980) has poited out, it has been common in many developing countries for certain groups to resist even apparently minor changes such as replacing 'irrelevant' academic curricula with vocational training at the secondary school level or measures that seek to reduce the 'inefficiency' of a high rate of primary school dropouts. Yet by 1979, China's educational system was considered to be

close to the World Bank's model programme for a developing country. The school curriculum was considered to have been tailored to meet the needs of the mass of the population, in that it emphasised language, mathematics and practical training through work- study programmes which were very successful (Rensburg, 1977: 354). In theory, the educational system provided for ten years of universal schooling; community management of schools was encouraged; a university selection system was instituted to eliminate discrimination against the poor, and there was an emphasis on raising awareness among adults about the problems and their solutions through small study groups and self-criticism. All these were achieved within twenty years at low cost. However, there are problems with the provision of universal compulsory education and China has not produced the requisite manpower that it needs for its rapidly growing economy. These problems point to the importance of the systems and bureaucratic approaches in initiating, developing and implementing educational reform programmes. At the same time, attention is drawn to the danger of centring an educational system round the charisma of an individual and the unreflective use of strict top-down and power-coercive implementation strategies.

2.5 The Experience of India in Educational Reform

India has had some comprehensive proposals for educational reform - the Sargent Report and Plan (1944) and the Kothari Commission Report and Plan (1966); the Radhakrishnan Commission Report and Plan for University Education (1948) and the A. L. Mudaliar Commission Report and Plan for secondary Education (1953)

(Adiseshiah, 1986). In the mid-1980s, the government itself prepared and issued a document entitled ***Challenge of Education - A Policy Perspective.*** The document contained "an overview of the state of education and pointers to the direction of future initiatives, based essentially on views and suggestions for educational planners, teachers, students, parents, intellectuals and citizens interested in education." It sought to initiate a nationwide debate which would provide ideas to facilitate the formulation of new education policy. The government's policy document on educational reform entitled ***National Policy on Education - 1986*** outined the country's philosophy, goals, organisational structures, management methods and resources that would help achieve the goals of the reform at all levels of the education system, and for all other socio-economic issues related to education.

The 1986 reform sought to solve problems that arose and persisted since the adoption of the 1968 Policy based on the recommendations of the Kothari Education Commission. There had been considerable expansion in educational facilities all over the country at all levels, two decades after the adoption of the 1968 Policy. (Unesco, 1988).

By 1985, despite a specific constitutional provision that free and compulsory education should be provided up to the age of 14 by the 1960s, progress was still miles off the target. Unesco (1988) reports that "the target itself has moved farther and farther away because of failures arising from inadequate resources or the

sheer lack of a viable strategy" (p. 29). Academic standards had also deteriorated because of rapid expansion without sufficient investment resources.

At the secondary there was discrimination against the rural and less affluent sectors of society in the training of the youth for the scientific and technological professions. Added to this, the variability in educational standards and the wide differences in the curricula which were being implenented in different schools meant that higher secondary schools received a heterogeneous bunch of elementary school graduates who lacked a sound foundation for higher secondary work. The problem with these weak students was that they imposed excessive strain on teachers already grappling with excessive teacher:pupil ratios and lack of equipment.

At the tertiary level, the major problem was low internal efficiency. The quality of available courses was poor and dropouts and failures were more than 59 per cent of the students enrolled. Also, by the mid-1980s, only 4.8 per cent of the relevant age group was in higher education programmes. For women, scheduled castes and tribes, this was much less. Rural areas had been marginalised in the provision of higher education. Moreover, little progress had been made regarding the promotion of science, technology and other professional courses at various levels (Unesco, 1988).

To address these problems the third comprehensive educational reform programme was initiated in 1985, followed by a publication of the National Policy on Education (NPE) in 1986.

The NPE focuses on the generation of knowledge in all fields through the encouragement of research and creativity aimed at encouraging socio-economic well-being and integration of the individual into the social system. The reform seeks to remove disparities among different social strata and improve access to and quality of education at all levels for all people in all locations.

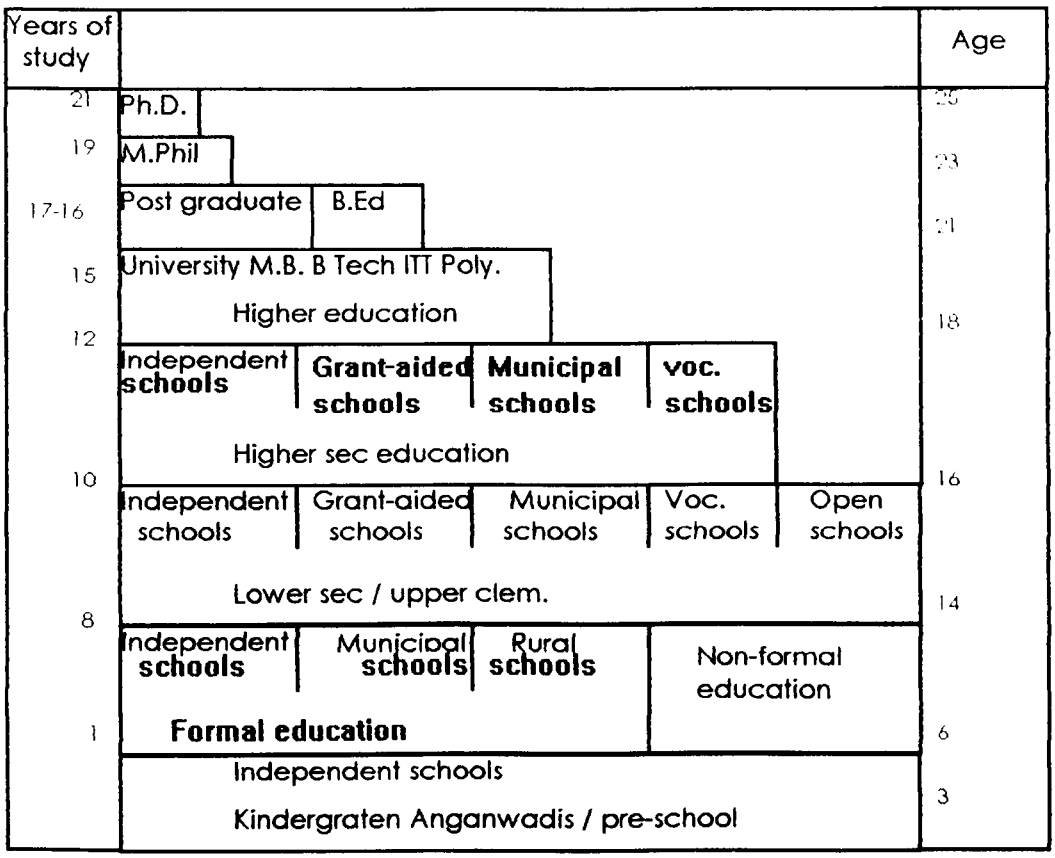
India has never ignored the provisions of her 1947 Constitution to "provide, with a ten year period, free and compulsory education for all children up to 14." Although the principle is yet to be realised, some states are within sight of the goal (see Taylor, 1991:326). The states that had made progress had done so in the midst of two persistent problems. First, is the poverty that has engulfed the people of India for a long time. Second, although caste was outlawed by the Constitution, there remains a deep-rooted incidence of disparities between scheduled castes and non-scheduled castes in the rural districts and among the uneducated (Taylor, 1991).

There are large sections of the population who continually are becoming marginalised in urban slums and in itinerant work groups where there is much overcrowding. Many of the slum dwellers are children who receive poor or no formal schooling. An India study of educationally disadvantaged population groups in 1990 notes that the slum dwellers "constitute a sizable number of the population." They are poor and because of inadequate intellectual stimulation in the general ethos of life in the slums, their children are unable to benefit from education even where it is provided (Unesco, 1990 - 1991).

Educational provision in contemporary India has sought to overcome the above problems in various ways, details of which vary from state to state. The present structure of educational provision in the country is as shown in Figure 2.1

The present educational structure is a 10-2-3 system (Fig. 2.1). This structure was evolved to minimise the considerable variation between states in the implementation of the 1975 Framework, which was the first concrete step to enforce a national curriculum schooling process. Although the Kothari Commission Report stressed national development, it did not provide specific guidelines regarding the implementation of its proposals. Thus, there arose problems when an attempt was made to introduce a national curriculum. So the Ishwarbhai Patel Commission of 1977 updated the Kothari Commission's proposal for a 10-2-3 structure to make implementation easier and faster.

FIGURE2.1: STRUCTURE OF EDUCATIONAL PROVISION IN INDIA



Source: Taylor, W.H. Comparative Education, 27 (1) (1991): 329

The Indian educational system operates three main types of schools (Taylor, 1991):

(i) Municipal schools which are financed totally from public funds and which as a rule, are poorly staffed and ill maintained.
(ii) Grant-aided or private schools which are mostly comprehensive, owned and managed by private trusts. Half of them have Christian managements, though less than 0.5 per cent of India's population is Christian. Tuition fees are paid by the central government which also influences the curriculum and pays the staff. Most of these schools have independent primary departments.
(iii) Wholly private schools which depend entirely on tuition fees and donations for their operation. These schools enjoy considerable autonomy with regard to the employment and dismissal of staff, determining the details of syllabuses and examinations, relationships with other schools, parents and industry. This independent sector boasts the most prestigious 'public' schools comparable to similar schools in Europe.

There is a wide disparity between town and country schools in terms of both teaching quality and teaching materials. Taylor (1991) asserts that municipal schools are badly under-provided compared to the affluent private schools. Also better provided for are schools financed by the industrial giants in India for their employees' children.

Taylor (1991) has noted a number of implications regarding the achievements of the central goals of the 1986 educational reform and the effectiveness of the suggested strategies. First, he points out that if the educational system is to work at "an optimum level of efficiency", then school and district administrations must be tightened to ensure that daily schedules are met and to guarantee that classes are actually taught. Second, he contends that class size needs to be cut down. With over classes 50, young teachers easily accept the advice of colleagues and settle into a pattern of unstimulating teaching. Third, Taylor points out that vocationalising the upper elementary and lower secondary would not be easy because many teachers tend to over-value liberal arts and pre-college courses. Besides, students' marks determine the vocation they will eventually choose. For example, twelfth formers who obtain top marks automatically proceed to medical studies, the next stratum engineering, the third business. Those at the bottom have to do an undifferentiated Arts degree or the teaching degree of B.Ed.

The implied problems outlined by Taylor (1991) are not new and the education authorities in India have tenaciously tried to overcome them. One area that has

proved problematic is the vocationalisation of the basic education curriculum. The good intention about this has often been to transform schools so that their graduates would be psychologically as well as technically prepared in the life and work of their local communities. Long before India's independence, Mahatma Gandhi had sought to provide so-called 'relevant' education - nearly always interpreted as education designed to bring modern agricultural techniques, health practices, etc. to 'backward' populations (Sinclair, 1977). Unfortunately, the history of such ventures tended to be associated with a dualistic principle of educational provision - ruralised education for children in the countryside and orthodox education for children in the towns. With the curricula of ruralised education designed to suit the circumstances of village life, it was impossible for village children to acquire the orthodox type of primary or middle school leaving certificates and matriculation certificates. Yet, these documents were essential for getting employment as junior workers in government service or with modern sector employers. Moreover, such certificates were stepping-stones to higher level education and more senior modern sector positions.

Consequently, dualism attracted public dissent and the Gandhian model was abandoned in the mid-1960s. Instead, upon the advice of the Kothari Education Commission (1964 - 1966), the Indian Government adopted a more orthodox curriculum supplemented by work-experience and social-service activities. It is this same work-experience that the 1986 educational reform is reiterating by

calling for the vocationalisation of the upper elementary and lower secondary curriculum.

The Indian experience in work-experience is interesting because most post-1970 educational reforms in the Third World have centred around a vocationalised curriculum. Although one may be sceptical about the success of work-experience in India, there is evidence that at least one Indian state has been able to marry the world of the school with the world of work without incurring the wrath of its clients. This state is Maharastra (Sinclair, 1977:375-6). Thus, it appears that such programmes have a high chance of succeeding where there is commitment on the part of administrators, co-operation on the part of parents and other stakeholders and, above all, concrete rewards are associated with the work-oriented curricula. The commitment envisaged implies provision of the facilities and tools for training and making post-school activities available and accessible to the educands.

The Assessment Committee on Basic Education felt that apathy towards Gandhian education by administrative officers caused the downfall of that educational reform. Indeed, good results were achieved where administrators were more committed, as happened in Maharastra (Sinclair, 1977). Moreover, the use of power-coercive or administrative political approach or the bureaucratic approaches alone is unlikely to yield good results. It is when administrators believe in the merits of the innovation that they evolve ways and means of

ensuring success. This demands free flow of information to convince all actors involved in the innovation. In other words, where the work experience programmes succeeded in the Indian case, the systems and bureaucratic approaches were evident and complemented each other.

2.5.1 Prospects and Lessons

India is a big country with some areas which are very dynamic and others which are stagnant. For example, places such as Bombay and the Punjab have grown rapidly through industralisation or successful agricultural production. On the other hand, other states such as Bihar State remain very poor. Consequently, inequality measures for India are poor because there are many very poor people and only a relatively small class of rich people. Secondly, the objectives of the Kothari Education Commission which have guided all the educational reform programmes since 1966 were to improve educational standards and expand educational opportunities; to relate education to productivity by emphasising science education, research and vocationalisation and by including work-experience as an integral part of the curriculum at all stages; and to eradicate illiteracy by 1986.

Despite these efforts, illiteracy is still a problem in India. However, considering certain broad social indicators, it is difficult to explain how India could have made the progress that it experienced without the educational reforms.

World Bank (1990: 142-43) social indicators of development show that although India has made some progress in industralisation, agriculture continues to engage over 70 per cent of the labour force. Also, only about 27 per cent of the total population live in urban areas.

India's population growth rate of 2.1 per cent is above the weighted average for the Asia region (1.8 per cent) and that of low-income countries, too. Moreover, although there has been a considerable decline in the infant mortality rate, the 1989 value of 95.4 is still much higher than the weighted averages for both the Asia region and the low-income countries. The educational reform made provision for tackling female illiteracy and enrolment of females in primary schools rose from 57.0 per cent in the mid-1960s to 81.0 in 1989. There is no information concerning how far majority of the females go once enrolled in the primary school. However, it is plausible to suppose that the improvement in female schooling may be related to the improvement in the infant mortality rate. It could also be partly related to the improvement in the population:physician and the population:nurse ratios (see World Bank, 1990: 143). While these ratios are poor relative to those for the Asia region, they nonetheless show that a lot of progress has been made in the production of health personnel - a feat that can be directly attributed to education.

Overall, India has made progress both economically and educationally, though much remains to be done. If it can smoothen the rough edges of its current

educational reform to improve technological and industrial development and solve the problems connected with its compensatory education programmes, the reform programme is very likely to hasten its overall development.

The Indian experience also shows the importance of informing the people and winning their support to carry through an innovation. These aspects of the Indian experience are important lessons that illuminate the study of the ongoing reform in Ghana.

2.6. Educational Reform in Malaysia

Comprehensive educational reform began in Malaysia after the signing of the Federation of Malay Agreement which accorded special privileges to the Malays, including legal backing to press for educational reform. The demands of the Malay community culminated in the Razak Report of 1956 which proposed that Malay should be the medium of instruction, but that the other languages and cultures should be preserved.

The Razak Report was enacted by the Education Ordinance of 1957 and reviewed by the Rhaman Talib Report of 1960, whose recommendations influenced the Education Act of 1961.

At school level, the objectives of the education policy were three-fold: to provide a minimum of nine years of education for all who wish to attend; to preserve and

sustain the languages and cultures of each community; and to unite the various races and create a national identity. The objectives were contradictory in some aspects and therefore required a certain degree of compromise in their implementation. As Cowen and McLean point out if parents are free to choose either a Malay or Chinese or a Tamil medium when their children attend primary school (as stated in (ii)), but secondary education is only available in Malay (as in (iii)), then the problems are obvious. Moreover, higher education policy was formulated along racial lines in keeping with the New Economic Policy, which required that manpower plans aimed at 30 per cent Malay participation in the professions, business and by industry by 1990. This implied that during the 1980s, at least, Malays were to continue to receive preferential access to higher education and probably to VIth Forms (Cowen and McLean, 1984)

Further developments in the educational reforms were incorporated in Development Plans. For example, the Third Malaysia Plan (TMP) 1976-80 sought to consolidate the education system; to facilitate national integration and unity; orientate and expand education and training programmes towards manpower needs and improve quality of education (see Cowen and McLean, 1984).

Before the adoption of the TMP, the Aziz Commission of 1967 had examined the teaching services and recommended that all teachers should become government

employees under a central board, and the teaching service should be divided into six categories and salary scales (Wong and Ee, 1971).

The Aziz Commission Report was followed by the Murad Report on school dropouts in 1973. The Murad Commission recommended greater expenditure on schooling, the introduction of compensatory education particularly in rural areas, and the amalgamation of small schools into larger educational complexes (Cowen and McLean, 1984).

The recommendation for compensatory educational programmes in the rural areas was important. It was consistent with measures being taken by many developing countries in the 1970s to bridge the gap between urban and rural populations.

A Cabinet Review of Education Committee was appointed in 1974 to review educational policy and implementation. Its report, published in 1979, contained the following major recommendations:

(i) that the primary curriculum, which was overcrowded and academic in style should be revised to concentrate on the 3 R's;
(ii) that a criterion-referenced test should replace the existing Standard 3 and 5 tests (and) that remedial teaching should be based on the results of this test;
(iii) that as soon as revenues allow, all children should receive 11 rather 9 years of education - i.e. automatic promotion up to Form IV;
(iv) that the overall grading of LCE/SRP and MCE/SPM certificates should be abolished, but subject grades retained;
(v) that the division into arts and science streams in Form IV should be abolished, and a general curriculum followed up to Form V;
(vi) that more vocational schools should be built and their curricula revised to include more practical training;
(vii) that the period of basic teacher training should be extended from 2 to 3 years;

(viii) that the position of English as a second language is reaffirmed; more TESL teachers should be trained. English resource centres should be set up in the states; (and) the lower primary English curriculum should be made more informal;

(ix) that the construction of new schools and classrooms should be accelerate to remove the need for morning and afternoon sessions. Multi-class schools should be amalgamated or provided with more teachers. More hostels should be built;

(x) that the provision of libraries in schools, particularly primary schools, is inadequate. All schools should have a library and an adequate library grant. Teachers should be trained in librarianship;

(xi) that the provision of special education for the deaf, blind and mentally handicapped should be improved.

The present structure of the Malaysian educational system includes the recommendations of the various reports of Commissions and reviews of the mid-1960s and 1970s, as well as the Third Malaysia Plan (1976-80), the Fourth Malaysia Plan (1981-85) and the Fifth Malaysia Plan (1986-90).

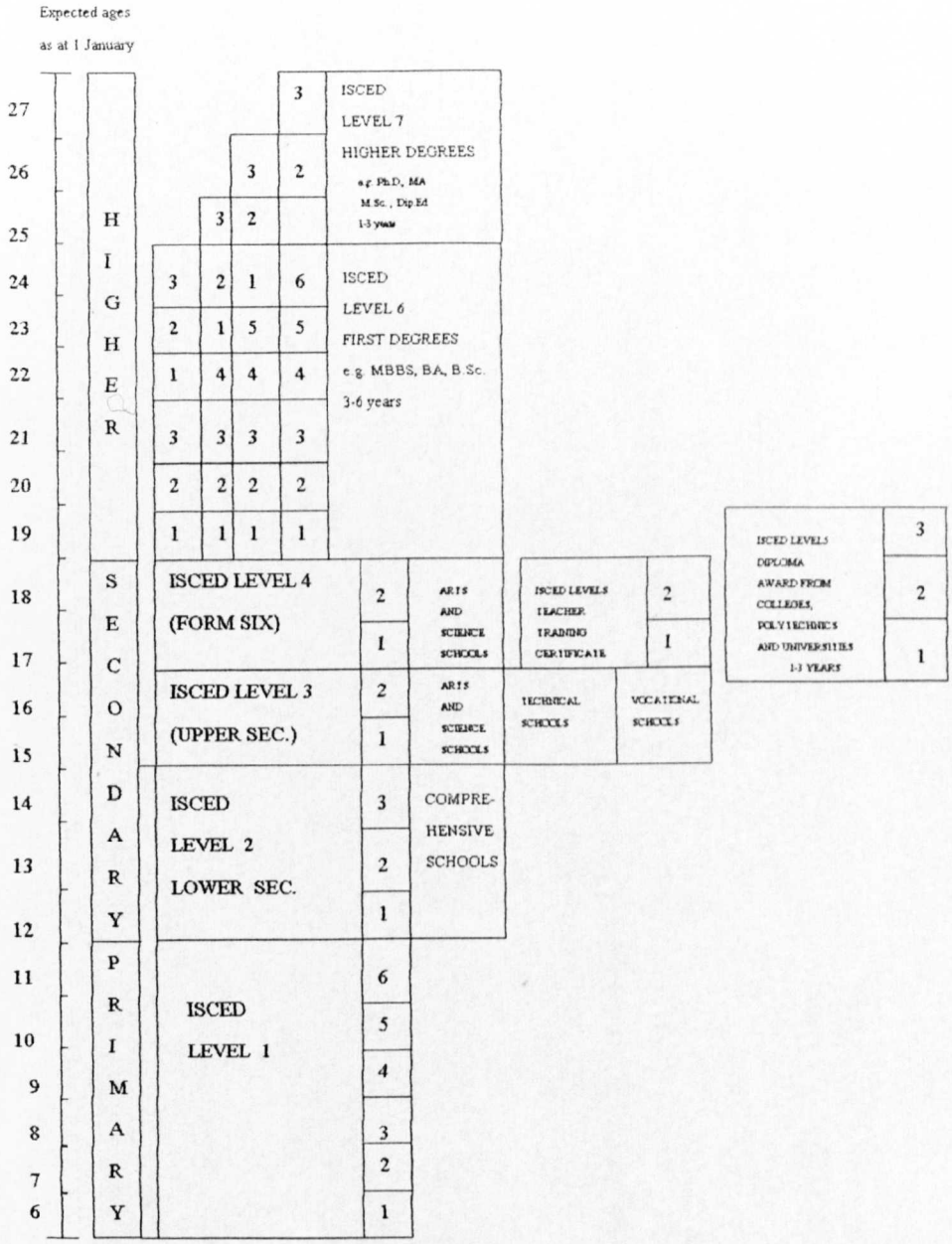
Malaysia's present educational system provides for six years of primary schooling, which starts at the age of six years. This is followed by three years in lower secondary school, two years in upper secondary school and a two-year Sixth Form course (Figure 2.3).

Education at the primary level is tuition-free and promotion has been automatic since 1972. Also, Universal Primary Education was attained in 1984 with gross enrolment percentages of 100 for males and 99 for females. Moreover, during the period 1965-84, enrolment in primary education increased from 1.44 to 2.15

millions, while the pupil:teacher ratio declined from 1:27 in 1965 to 1:24 by 1984 (ADB, 1988).This ratio has further decreased to 1:21 (Unesco, 1991).

FIGURE 2.2 STRUCTURE OF FORMAL EDUCATION IN MALAYSIA

ISCED: International Classification of Education



SOURCE: Adapted from Comparative Education, vol. 27, no. 2, (1991), p.212.

Upon the recommendation of the Cabinet Education Review Report (1979), the Primary School Leaving Certificate was abolished, to make all tests at the primary level essentially evaluative in nature. There is therefore no entrance examination to lower secondary schools. All primary leavers proceed to lower secondary schools, where promotion remains automatic through the three forms at that level. Wilson (1981, 1991) reports that there exist high dropout rates between the primary and lower secondary levels though enrolment at the secondary level has continued to increase.

Figure 2.2 shows that the Malaysian secondary education sector comprises lower secondary (I - III) and upper secondary (IV and V), followed by a Sixth Form (Lower and Upper). While the lower secondary programme is comprehensive, the upper secondary programme is streamed into Arts and Science, Technical and Vocational. The 1979 Cabinet Committee of Education Review Report recommended that the streams should be reduced to two: academic and vocational (see Wilson, 1991:211).

Sieving at the secondary level begins at the end of lower secondary education. There is an entrance examination for upper secondary school and this examination tends to reduce the number of lower secondary leavers proceeding to upper secondary schools (see, for example, Wilson 1981:74; 1991:211).

The private secondary sector is relatively small. Most secondary schools are either government or government-assisted schools, catering for some 91 per cent of the secondary school population (Wilson, 1991).

Certification of Malaysian school leavers begins at the end of lower secondary education. Students who successfully complete lower secondary school are awarded the Lower Certificate of Education (LCE), known in Malay as Sijil Rendah Pelajaran (SRP). Such students then compete for places in upper secondary schools or are streamed into technical and vocational schools, where they pursue two-year courses. Science, Arts and Technical students sit for the Malaysian School Leaving Certificate Examination (Sijil Pelajaran Malaysia - SPM) at the end of their two-year programmes. Successful candidates may then proceed to further two-year pre-university programmes in post-secondary institutions which consist of lower and upper Sixth Form Arts, Science and Technical streams. Technical-vocational education candidates sit for the Sijil Pelajaran Vokasional Malaysia (SPVM) examination at the end of Form V. If successful, they may seek admission to the Polytechnics or enter the world of work (Wilson, 1991).

The fourth Malaysia Plan tackled manpower development. It provided for an expansion in tertiary education programmes in accordance with manpower requirements. This included the expansion of courses at diploma and certificate levels to cater for manpower needed at the sub-professional and technician levels.

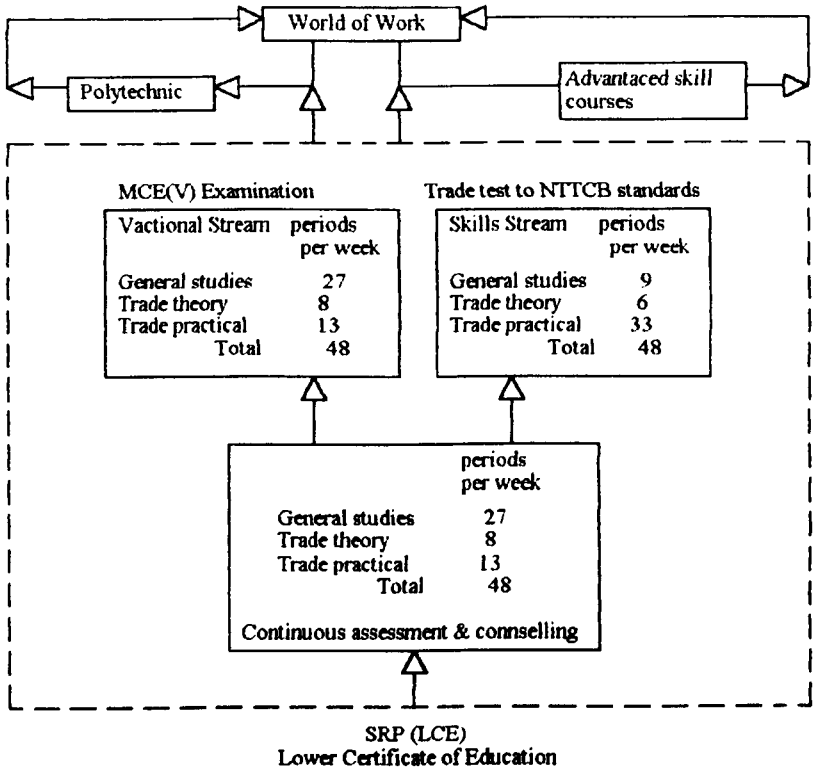
The emphasis was on courses in science, technical and related subjects at both the diploma and degree level (Wilson, 1991: 218).

The success of the plans for solving the manpower problems in order to produce the necessary skills for industrial growth depended on appropriate curricular reforms. So curricular reforms were begun in the 1970s and culminated in the New Primary School Curriculum which sought to make education more relevant to the pupils' immediate environment and make it more flexible and integrated (Ibrahim, 1991: 95). In the 1980s, the technical-vocational education system was also reformed at the secondary level. The restructuring was completed and implemented during the 1987/88 academic year. The main features of the reformed system were: the provision of instructional materials for each course; the availability of course workbooks accompanied by phase tests; and the separation of the new curriculum into three components: study of engineering and technology; skill development in specific areas; and technical drawing (Wilson, 1991).

An important feature of the curriculum or system reform is the streaming of the secondary vocational students at the end of Form IV into vocational and skills streams. Achievement and aptitude are the criteria used for the streaming. Thus, vocational stream students pursue courses which emphasise academic subjects while skill students pursue courses which involve greater practical work in order to acquire skills that meet industry standards (Wilson, 1991). The deferment of

specialisation is important because it gives students the chance to broaden their outlook and affords them ample time to make career choices.

Figure 2.3: NEW SYSTEM OF SECONDARY VOCATIONAL SCHOOLS IN MALAYSIA



Source: Comparative Education vol. 27 no.2, p.215

Figure 2.3 shows the structure of the reformed secondary vocational school system in Malaysia. Students with the Lower Certificate of Education enter the secondary vocational system and pursue an undifferentiated programme for one year. After the first year the students are streamed according to their achievement and aptitude. Vocational stream students continue to pursue studies emphasising general studies and sit for the Malaysia Certificate of Education (Vocational) - MCE(V), while skill students devote more time to practical work and take the National Industrial Training and Trade Certification Board (NTTCB)

examination. Vocational students may enter polytechnics while skill students are expected to seek industrial placement. However, skill students also have opportunities to enter some secondary vocational schools to undergo advanced skill training in specific areas.

Primary school enrolment in Malaysia has increased steadily since the mid-1960s and has reached a point where the enrolment ratios for males and females are equal (World Bank, 1991: 43). This gives an idea about the impact of the reforms.

Furthermore, 99.4 per cent of pupils enrolled complete at least four years of schooling compared to 68.6 per cent for the whole of the Asia region. This is significant because there is a relationship between the average amount of education received by the labour force and GDP. (see World Bank, 1990:43). Also, there has been vigorous economic growth in Malaysia since the mid-1960s, averaging 4.0 between 1965 and 1989 (World Bank, 1991).

The reduction of illiteracy, particularly among females is also significant. The various educational reforms since the mid-1960s have emphasised the bridging of the gap between males and females, and urban and rural populations.

Malaysia's rate of female illiteracy in 1990 was 34 per cent which was much lower than the weighted average for the Asia region (52 per cent) and quite close to that for all lower-middle-income countries (31.6 per cent). This progress in women education is very significant because the educational status of adult women has been found to be the most important variable that explains changes in infant mortality and secondary enrolments (see, for e.g. World Bank, 1991:49). The same source shows that infant mortality in Malaysia has drastically reduced. Also, enrolment in secondary education for both males and females has increased steadily over the same period; more impressively so for females. Thus, there is evidence of positive social advancement that can be associated with the objectives of the educational reforms - falling infant mortality and rising female literacy.

Malaysia's efforts at fighting poverty have been remarkable. While there is no clear link between economic growth and changes in income distribution, there is a strong association between economic growth and a reduction in the incidence of poverty. World Bank (1990: 49) provides evidence that growth is associated with a reduction of absolute poverty. Thus, working on the premises that some amount of education is associated with economic growth, it is plausible to postulate an association between education and the reduction of poverty, given the association between economic growth and the reduction in the incidence of poverty. In the case of Malaysia, there has been a phenomenal reduction in poverty since the mid-1960s. For example, while 18 per cent of Malaysia's population lived below the

poverty line in 1970, only 2 per cent were estimated to be living below the poverty line in 1990 (*Newsweek,* March 1, 1993:32).

Other noneconomic indicators that enhance the quality of life, such as population:physician and population:nurse ratios as well as newspaper circulation in Malaysia have improved during the past twenty years (see World Bank, 1990). Unless there is hard evidence of the importation of health personnel into Malaysia, it would be difficult to explain away the improvement in health delivery ratios without accepting the role of education.

2.6.1: Lessons, Prospects and Potential

From the foregoing, one can say that Malaysia's educational reform does have prospects and potential to lift up the country to higher levels of development. The key points to note are the universalisation of primary education through diplomacy rather than compulsion (basic education is free but not compulsory); the implementation of compensatory education programmes that seek to close the gap between the disadvantaged and the privileged; the efforts at improving proficiency in the 3 R's at the primary school level; and the emphasis on science and technology to match the pace of industrial growth. The trickle down effects of development have been impressive. The educational reforms contained elements of bureaucratic approaches coexisting with systems and diffusionist approaches. These patterns are useful in understanding issues concerning the prospects and potential of the educational reform being implemented in Ghana.

2.7. Educational Reform in the Pacific

2.7.1 The Experience of Papua New Guinea (PNG)

'Western type' education started in PNG in the 1870s and, since then, the structure of schooling has changed because of increasing governmental intervention. The change is in terms of growth in the size and scope of the system and the organisational structures. There is also a continuing tension between education for the modern sector and education for the traditional sector (Bacchus, 1987; Weeks and Guthrie, 1984).

The Christian missions provided early schooling (Smith, 1975). The Australian administration showed scant interest in the few schools that it opened in New Guinea and did not interfere much with the missionaries' educational activities. In Papua, the administration established no schools at all but it exercised some control over mission education via regulations and funding (Bacchus, 1987).

Generally, the colonial administration and the missions had similar goals. The ultimate goal was to convert the "native". The administration wanted to make the indigenes of PNG accept European ways in general, while the missionaries wanted to instruct them in Christian ways. But the missions and the government differed in their views and attributes of "development". These differences have influenced educational reform in PNG to the present day.

When Papua and New Guinea were unified after World War II, W.C. Groves was appointed the first Director of Education. Groves' activities were influenced by his own experience in prewar New Guinea and also by the work in the 1930s of the anthropologist F.E. Williams. He was further influenced by the educational policies that Britain pursued in her colonies in Tropical Africa. The British Colonial Office Memorandum on Education Policy in British Tropical Africa emphasised a more active role in education. The focus was on the contribution of education to the socio-economic development of the colonised societies while preserving those things that stabilised local community life (Bacchus, 1987).

Groves began reforming education in PNG by encouraging the development of area schools to be run on an experimental basis. His reforms also included the pooling of governmental and missionary educational efforts, making the government responsible for matters relating the quality of education in all schools, teacher training, language policy, core curricula, and discipline. As the colony got closer to the establishment of a full exchange economy, Groves modifed his approach to give more emphasis to socio-economic development and reduce the differences between the missions and the government.

By the mid-1950s, pressures for greater educational opportunities for the people of PNG increased. Universal primary education became an official objective in 1955, thanks to the Australian Minister for the Territories, Mr Paul Hasluck.

(Hasluck, 1956), whose convictions were compatible with the human capital theory and the proposals of the UN and Unesco in the early 1950s.

However, one aspect of Hasluck's educational policy was unpopular: he had no intentions of going beyond the universal primary education goal. The reason behind this attitude was that Hasluck believed in the gradualist approach to social change, and therefore favoured little provision for education beyond the primary level. Thus, the overriding educational policy of the administration was to make education available at the grassroots level by pursuing a policy of mass literacy and universal primary education. All children were expected to be able to read and write English. This required special attention to teacher training. Also, Hasluck emphasised manual and technical training and sought the co-operation of the missions in implementing the policies.

The New Education Ordinance of 1952 legalised the proposals and declared education a joint enterprise between the government and the missions. It also empowered the administration to control and direct secular education. Furthermore, the Ordinance provided for the estabishment of "a full range of educational institutions ...; an appreciation of the principles of democracy and the extension of English as the lingua franca"(Bacchus, 1987:16)

Bacchus (1987) sees the new resolve to strengthen and extend the range of educational institutions in the country as a way of: (i) helping to ensure that the

institutions became "the centre of efforts to improve social and economic conditions" of society through planning a strong "emphasis on agriculture and manual skills", and (ii) assisting in preserving those "valuable elements in the indigenous society", while seeking to "assist adjustment to new cultural influences". Yet, by the mid-1950s, the attitude of the government concerning the development of secondary education showed a deviation from the provisions of the New Education Ordinance. The government decided to de-emphasise secondary education ostensibly to give priority to providing a sound primary education for as wide a section of the population as resources permitted, and lay a broad base for the development of a future programme of secondary education to prevent "the development of an indigenous and potentially exploitative elite" (Weeks and Guthrie, 1984: 36; Bacchus, 1987: 15). Thus, where the administration felt obliged to provide post-primary education, it would develop "non-primary" schools rather than just "secondary" schools. So secondary education was largely neglected by the government between 1950 and the early 1960s.

Little progress was made towards universal primary education, too. For by 1965, fewer than 1 per cent of adults in PNG had had a full primary education and less than 100 people had received a complete secondary level education (Bacchus, 1987: 17). Also, the missions were still the major providers of education.

However, in 1958 when G.T. Rosco became Director of Education, enrolments began to rise despite the poor quality of education because:

(i) the substantial rewards available to those who had received formal education
(ii) the desire of the missionaries to extend their influence in the country; and
(iii) the popular demand for education as a result of the prestige that it conferred on individuals who had received it (Bacchus, 1987).

Also, the rapid independence for many African and Asian colonies in the late 1950s had resulted in pressure being exerted on Australia by the UN, and some people in Australia itself and within the colonial administration in PNG. The UN was acting on the report of its Mission led by Sir Hugh Foot (UN, 1962), which had severely criticised the way education in PNG had been handled. The report claimed that inadequate efforts were being made to provide secondary and tertiary level educated manpower necessary for independence. The report therefore recommended more emphasis on secondary and tertiary education, calling for at least 100 university graduates a year (Weeks and Guthrie, 1984: 36; UN, 1962). Thus, the Foot Report and the agitation within Australia and PNG hastened the demise of Hasluck's gradualist concentration on primary education and a change in policy had to be effected (Weeks and Guthrie, 1984, Bacchus, 1987).

Consequently, the PNG administration appointed a Commission of Enquiry into Higher Education chaired by Sir George Currie (Weeks and Guthrie, 1984; Bacchus, 1987). The report of this Commission led to the establishment of universities in Port Moresby in 1966 and later in Lae, and various vocational technical and sub-professional institutions, too (Weeks and Guthrie, 1984). Thus,

from 1964 onwards, a phenomenal expansion in secondary education occurred so that the 1960s saw the consolidation of the foundations for a full-fledged education system, capable of providing the relevant manpower for an independent PNG. However, in order to effectively develop tertiary and technical education, resources had to be shifted away from the primary education sector. Thus, the government was compelled to abandon the goal of primary education as a prime objective.

Of the several problems that followed the expansion of primary education after 1958 and secondary education after 1963, the economic problem was, perhaps, the most serious. Grants-in-aid became increasingly inadequate so that the missions could not afford to pay their teachers the same salary paid to government school teachers. Consequently, many mission school teachers resigned their posts to fill new positions in government schools (see Weeks and Guthrie, 1984:37), thus triggering off an even greater expansion in government schools, compelling the government to take another look at the educational system. So a five-year education plan was drawn.

In line with the proposals of the five-year education plan, an Advisory Committee on Education was appointed to make recommendations for the establishment of a national system of education that would coordinate administration and mission efforts within available resources. The Committee, chaired by W.J. Weeden, produced their report in 1969. This report formed the basis for a new national

system which was implemented by a new Director of Education called Dr Ken McKinnon.

The Weeden Report facilitated the passing of the 1970 Education Ordinance which for the first time, brought most missions into one national education system. This Ordinance empowered the government to exercise major control at the centre while the missions had power at the lower levels of the system. The definition of major policy matters was also the prerogative of the central administration, though issues relating to the selection of pupils for primary and secondary schools could be undertaken at the district level, using criteria established by the National Education Board. So, too, could the districts arbitrate on disciplinary matters involving students, determine fees within the limits approved by the Board; appoint, promote, suspend and transfer teachers; initiate, develop and implement plans for setting up and expanding schools, and promote nonformal education (Smith, 1975; Weeks and Guthrie, 1984:38).

The attainment of internal self-government in 1973 boosted a further overhaul of the education system. This began with the production of a draft report in 1974 articulating a philosophy centred around education for the community. The focus was on decentralisation, self-reliance and equitable rural development (Toloto, 1974, cited in Weeks and Guthrie, 1984).

A revised version of the report formed the basis for the Education Plan 1976-1980 (see Weeks and Guthrie, 1984). Some of the highlights included changes in designation, such as primary schools becoming known as community schools. Also, contrary to the recommendation of the 1974 draft report, English was retained as the language of instruction in schools. Because of the decentralization of policy-making power, the control of education had to be redefined to tally with the powers of the newly established provincial seats of power. Thus, the national government retained ultimate control over teacher conditions and the national curriculum. It also retained responsibility for primary teachers' colleges, national high schools for grades 11 and 12, technical colleges and a correspondence college. Provincial governments control primary schools, provincial high shools, nonformal education, aspects of curriculum and the attendant educational planning.

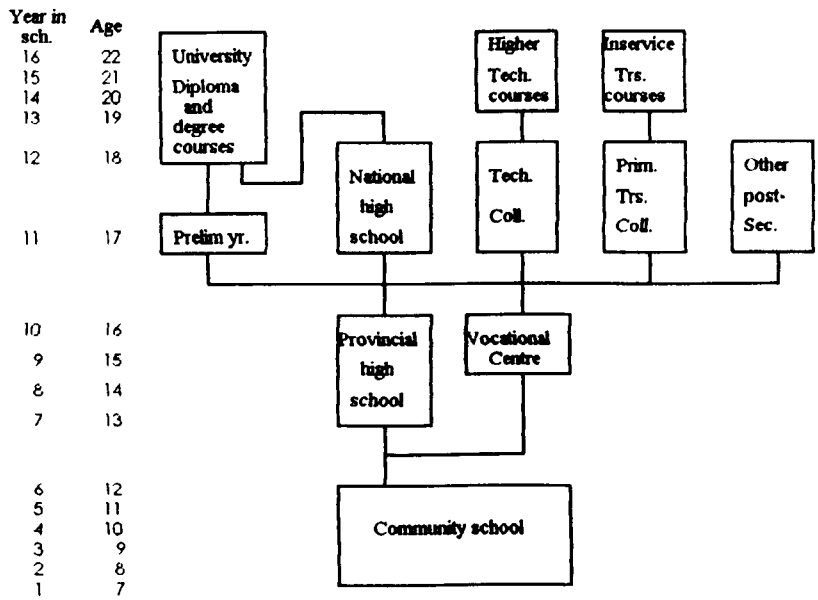
The division of powers outlined by the Education Plan 1976-1980 proved rather unwieldy and it was feared that efficiency was being undermined in many provinces (Runawency and Weeks, 1980, Weeks and Guthrie, 1984).

The current system of Papua New Guinean education provides for 6 years of primary or community school (from age 7) followed by 4 years of provincial or lower secondary school and two years of national high (upper secondary) school (Fig 2.4). However, because of the highly selective nature of the system only a few students do, in fact, have access to 12 years of schooling. Promotion to grades

7 and 8 is automatic for grade 6 students, but admission from grade 8 to grade 9 is dependent upon meeting selection requirements. At grade 10 there is a major selection process before admissions to grade 11 in national high schools (i.e. upper secondary school) are made (Bacchus, 1987: 18). Weeks and Guthrie (1984: 41) estimate that about 10 per cent of the age cohort reaches grade ten while only one-half per cent make it to the university and 3 to 4 per cent receive some forms of vocational training.

2.7.2 The Current System of Education in PNG

FIG. 2.4 PNG EDUCATION SYSTEM STRUCTURE 1981



Source: Department of Education (1982) Education Annual Report 1881, Port Moresby, Government Printer, p.8, reproduced in Weeks and Guthrie (1984) "Papua New Guinea". In R.M.Thomas and T.N. Postlethwaite (eds.) Schooling in the Pacific Islands. Oxford: Pergamon Press, p.41.

2.7.3 Demand for and Supply of Secondary Education in PNG

Much of the controversy concerning the provision, content and relevance of education in PNG has been in the area of secondary schooling.

Papua New Guinea has sought to expand and strengthen her export sectors and also improve her self-sufficiency through import-substitution industralization (Bacchus, 1987). This requires a programme of a level that would assure efficiency to ensure not only the supply of trained nationals for jobs in the various sectors of the economy, but also progressively to replace expatriates by locals at all levels of the job market.

Bacchus also points out that because of the rapidly increasing population the formal sector can absorb no more than 15 per cent of the labour force. Therefore those who plan the output of educated persons at the secondary and tertiary levels, must take the limitations of the job market into account. The implication of this is that secondary school leavers should be prepared with the knowledge, skills and attitudes which will help facilitate their return to the rural sector of the economy, better equipped to raise their own levels of efficiency and contribute towards the general improvement of the quality of life in the rural areas.

The government also wishes to provide schooling in order to ensure greater equality of access to facilities between boys and girls, between children of various communal groups living in different provinces and between diverse socio-

economic groups in society. These issues concern democratisation of education and are important in the lives of developing countries because the merits of equalising opportunity are many. In PNG, equality of access is considered important because it will facilitate the utilisation of the creative potential of the entire population and promote national solidarity. Thus, universalistic considerations will likely be preferred to ascriptive criteria and "wantokism" (attachment to those who speak the same language - "one talk") (Bacchus, 1987).

Despite these apparently obvious merits of expanding secondary education, there has been some controversy in this regard because of economic constraints. It is unwise for any policy for the future development of secondary education in any developing country to ignore, on the supply side, the current and projected resources of the country. In the case of PNG, the planning of secondary education has been subject to both social and economic constraints. The government has had to balance its responsiveness to the populace's strong and popular demand for secondary education against the rather restricted need for higher level manpower.

Some writers fear that additional pressures for expansion of secondary education facilities may lead to an over-production of post-primary level school leavers. They have warned that the formal sector will not be able to provide employment for a disproportionately large percentage of the workforce and have advised that to ignore the warning is to run the risk of having to divert resources from other areas of development (Conroy, 1976: 55; Bacchus, 1987: 67). On the other hand,

the government's major policy of eventually replacing expatriates at all levels of the economy with local people will hardly materialise without an increased number of local higher level manpower. This means giving attention to post-primary level education.

Yet, unless attention is paid to rural development, migration to the towns and economically vibrant places is likely to increase. Under such circumstances, the education system will merely encourage people to desert the traditional, subistence, rural sector to chase the few jobs in the financial sector of the economy. This will lead to employers raising the qualifications required for jobs which, in turn, will lead to a demand for even more education (Bacchus, 1987, Dore, 1976). To forestall this situation curricula reforms in the secondary school system have been implemented to help contribute to the improvement of the economic viability of the subsistence sector.

2.7.4 Reforms of the 1980s : Problems and Prospects

According to Weeks and Guthrie (1984) four main problems facing the PNG school system are equity, efficiency, localisation and capacity to meet standards which date back to the classical colonial and pre-independence period. Post-independence attempts at solving them have produced mixed results. In some cases remedial efforts have been forthcoming, but in others the measures taken to solve the problems have rather exacerbated some of the problems.

Equity of educational opportunity between regions and provinces, especially with regard to equality of access, has been a bother since the attainment of independence in the mid-1970s. In the early 1980s some provinces also became concerned about equalisation within the provinces (Bacchus,1987. Weeks and Guthrie, 1984; Conroy, 1976).

Despite the considerable increase in primary school enrolment since the 1950s, in 1960 only about 40 per cent of children aged 7-12 years were actually enrolled in and attending schools (Bacchus, 1987). Moreover, the Brown Report (1971:10) exposed "great differences between the provision of education in the various regions" - the New Guinea Islands region had more places than school-age children, while the Highlands districts had places for only one-third of the school-age population.

Details of the measures taken to redress these imbalances and the effects of these measures have been outlined in a number of publications. (See, for example, Conroy, 1976: 203; Weeks and Guthrie, 1984: 56; Bacchus, 1987: 120-130). Furthermore, since 1972 there has been some reduction in the provincial disparities regarding the provision of secondary educational facilities (Bacchus, 1987).

But unequal opportunities among children in PNG in terms of their access to secondary education have persisted, particularly between the sexes and among

different social classes. In the rural areas, too, access difficulties are due to the nature of settements or the scope of economic activity. Children in small rural settlements inhabited by just a few families have to walk long distances to get to the village school. Thus, non-attendance or dropping out from primary school is common in such areas. The educationally backward areas are in the financially disadvantaged provinces which are cut off from virtually all educational activity.

Also serious is the inequality of educational opportunity based on social class differences. Although PNG society was quite egalitarian, recent trends show that there is a growing social and economic stratification of the society. Consequently, there is a growing number of parents able and willing to pay anything to send their children to international primary schools at the age of five years. This early educational advantage provides assurance for the acquisition of what Bacchus (1987: 142) calls "the most valued cultural capital asset... i.e., greater facility in the use of English", which gives such lucky children an enormous advantage over their peers, in accessing secondary and tertiary education and also in landing executive jobs in the society. Yet no financial assistance of any form is available in government provincial schools to help the children of the power families, especially peasant farmers, though some church agency schools, do offer some help (Bacchus, 1987; Murray, 1981).

Disparity in educational opportunities on the basis of sex is also a problem in PNG. It is only recently that the number of girls attending primary and secondary

schools has been increasing. Nonetheless the government is concerned about providing education for females. Its position on female education is forcefully expressed in the Brown Report of 1981 which argued that an educated wife and mother in the home is a source of motivation to the husband and children both economically and socially (see Bacchus, 1987: 143).

Therefore a number of concessions were introduced to enable girls to get into District High schools and National High schools (Bacchus, 1987). Despite these measures, however, the government has not bridged the gap in access to educational opportunity between the sexes. Bacchus (1987) attributes the problem to the fact that there are deap-seated ideas concerning traditional roles that women are expected to play, such as housewives, mothers, teachers, nurses and clerks. Thus, even when they are given the chance there is no incentive to go beyond what is essential to perform the traditional functions. Also, some parents consider girls' education a "risky investment" and are less willing to send their daughters to secondary schools. But just as important is the inadequate dormitory space in boarding schools for girls, and the recruitment practices in the job market that discriminate against women and relegate them only to lower level occupations.

Another source of inequality is reflected in the variation in the quality of school facilities and hence in the quality of education provided in the different provincial high schools. Urban schools are better equipped than rural schools. Some studies do suggest, however, that there is no relationship between the level of school

facilities available and student's academic performance (Coleman, 1966). Bacchus (1987) has pointed out that these findings are not applicable in the case of PNG, partly because many of the secondary schools simply do not have the minimum level of facilities for the effective teaching of most subjects. In any case, in his comparative study of influences on academic achievement in developing countries, using results from Uganda and more industralised societies, Heyneman (1980) showed that improvement in school facilities can positively affect student's learning outcome.

Therefore, as regards equity, while an inherited colonial problem of spatial inequality has been partly resolved, measures at reducing the inequality of access for females has been difficult to implement because of traditional practices. Also, quality of outcomes has received scant attention. However, because of concern for standards the 1980s have seen some attempts aimed at improving the quality of output (Weeks and Guthrie, 1984).

The next major problem of the PNG educational system that has been addressed by the reforms is the issue of efficiency. There have been two strands of this. The first involved maintaining a balance between equity of access to schools and ensuring that the outcomes are attained efficiently. This referred to a controversy over the selection of students into provincial high schools. Before 1972, children were chosen to enter high schools strictly according to their performance in a nation-wide grade 6 examination. But there were social and educational problems

associated with this method of selection. Therefore in 1972 and 1973 selection was made partly according to social criteria. This way also revealed "problems of favouritism and improper administration". So the methods of selection were altered in 1974 to involve a quota system by which "a fixed proportion of the top-ranking pupils from each community school were admitted to high school" (Weeks and Guthrie, 1984: 56). Although this latter method was believed to promote equity, it tended to lower educational efficiency because a number of mediocre pupils entered high school while a number of brilliant students could not.

The second strand of the efficiency problem relates to administrative bottlenecks. Although the colonial administration in PNG was largely controlled from Canberra, there were field officers resident in PNG who exercised considerable on-the-spot initiative, so that a large centralised bureaucracy evolved in Port Moresby in the 1960s. However when self-government was attained, inexperienced local officers who occupied the high offices vacated by the expatriates proved unequal to the tasks, resulting in inefficiency. However, the top administrators are trying to cut down and simplify the bureaucray to suit the needs of PNG (Weeks and Guthrie, 1984: 57).

2.7.5 The Secondary Schools Community Extension Project (SSCEP)

PNG inherited a Western model of schooling from its colonial master (see Vulliamy, 1983: 81).

This pattern of schooling has been questioned in many developing countries (Sinclair and Lillis, 1980; Vulliamy, 1983). However, attempts to introduce more relevant, community-oriented education in these developing countries have been resisted and have eventually failed because they have been considered inferior, especially where a dual system of academic and vocational schooling has been operated (Colclough, 1976; Foster, 1965b).

So when PNG embarked on its post-independence educational reforms, it was guided by the experiences of other developing countries. The most important project that has sought to reform the colonial pattern of secondary schooling is the Secondary Schools Community Extension Project (SSCEP).

According to Vulliamy (1983: 82-83) the SSCEP is similar to Tanzania's "Education for Self-Reliance" and Cuba's "Schools in the Countryside" campaign. Its broad aims include:

(i) the production of school leavers who are both less alienated from village life and more capable of contributing to rural development through self-employment;
(ii) the de-institutionalisation of parts of secondary schooling by both setting up outstations, where small groups of students go for weeks at a time, and
(iii) developing community extension activities and learning programmes in local areas;
(iv) the redesigning of curricula in grades 9 and 10 (approximate age 15 and 16) so as to relate academic and practical skills in a structured way;
(v) the improvement of teaching and curriculum devlopment skills of teachers in SSCEP schools via intensive in-service school-based training programmes;
(vi) and the maintenance of academic standards in the SSCEP schools in order that the opportunities for a small number of students to provide to higher education are not curtailed.

A try-out phase of the project began in 1978 to test whether it was feasible to provide a more appropriate rural education at the secondary level, without falling victim to the dangers "of a dual curriculum split between academic and vocational streams." The pilot programme involved five representative secondary schools and covered the period 1978 to 1982 (Vulliamy,1983: 82).

Bacchus (1987) reports that a preliminary evaluation of the project shows that it has been "successful". However, he points out that the real test of the "success" of the project lies in its capacity to challenge the lifestyles of the students who have undertaken the programme, after they have left school and returned to the village. It remains to be seen whether the school leavers will use the skills which they have acquired under SSCEP to better the lives of the villagers and themselves. Vulliamy (1983) feels that this will not be easy, judging from the catalogue of cultural practices and belief systems that may discourage the youngsters from applying their knowledge and skills in the villages - notably the degree of monetization of the exchange economy, social status of the youngsters and fear of the effects of magic.

Notwithstanding these potential difficulties, it has been suggested that there is merit in extending the project. Vulliamy (1983) points out that despite the reservations some students expressed about the possibility of their using their knowledge in the villages, most of the students and their parents support the idea of the SSCEP. He attributes this positive reception of the project to the careful

manner in which it has been implemented. Another contributory factor mentioned is that "despite the introduction of more practical work, students' chances of selection for wage jobs or higher education will not be impaired" (p. 91). This last point is important because most innovative programmes have been rejected by students and parents for fear of their apparent lack of appeal for higher level education and wage jobs in the formal sector of the economy.

2.7.6 Potential and Lessons of the Educational Reforms for the Development of PNG

Generally, the educational reforms have accelerated the expansion of the education sector and PNG now has the means to provide the relevant manpower to replace expatriates in every sector of the country's economy. This would eventually mean a savings on the high salaries and other incomes appropriated by expatriates which could then be applied to the development of lagging regions and sectors of the economy.

The experience of PNG provides three important lessons : first, the co-operation of various sectors of the system is essential in providing manpower for both the traditional and the modern sectors of the economy. Second, it needs greater commitment than legislation to minimise disparities in the delivery of education. Third, the bureaucratic set-up should be in tune with the overall development strategy.

2.8 Educational Reforms in Latin America

2.8.1 Cuba's Experience in Educational Reform

Many changes in the history of Cuban education followed the country's 1959 Revolution, indicating the country's order of priorities. Cowen and McLean (1984) have traced these changes as follows.

In the 1960s, Cuba focused on expanding mass education. This involved a rapid growth of elementary schooling and a development of elementary level adult education. The aim was to make education accessible to everyone. The principle was the democratisation of education and the objective was to attain universal education. Universal education was considered as an investment and also a basic human right. Besides, Cuba sought to use the equalitarian movement to infuse a strong ideological element - was a socialist ethos based on Marxism / Leninism, with an emphasis on a strong view of Cuban historical and cultural heritage - in the content of education.

By the early 1970s, universal elementary education had been achieved both for children and adults. Attention then shifted towards the achievement of universal lower secondary schooling. This was achieved in the period 1981-85 and the emphasis moved to upper secondary schooling.

In the mid-1970s, qualitative rather than quantitative education was pursued by keeping pupils' attainment records at the primary level and providing highly

technical courses at upper secondary level in line with state manpower requirements.

The attainment of universal primary education occurred without the use of qualified teachers. Volunteers were used especially in the rural areas. Consequently standards were low. Therefore after attainment of universal primary education, it became necessary to improve the quality of education.

To this end emphasis was placed on pre-service and in-service teacher training and also on a systematic monitoring of pupils' progress through evaluation and cumulative record keeping. Also, grade repetition was enforced and only pupils who met the set standards were promoted to the next grade.

2.8.2 Cuba's Present Education System

The present system of Cuban education reflects the objectives outlined by the Cuba Ministry of Education in 1981. According to Cowen and McLean (1984) these are:

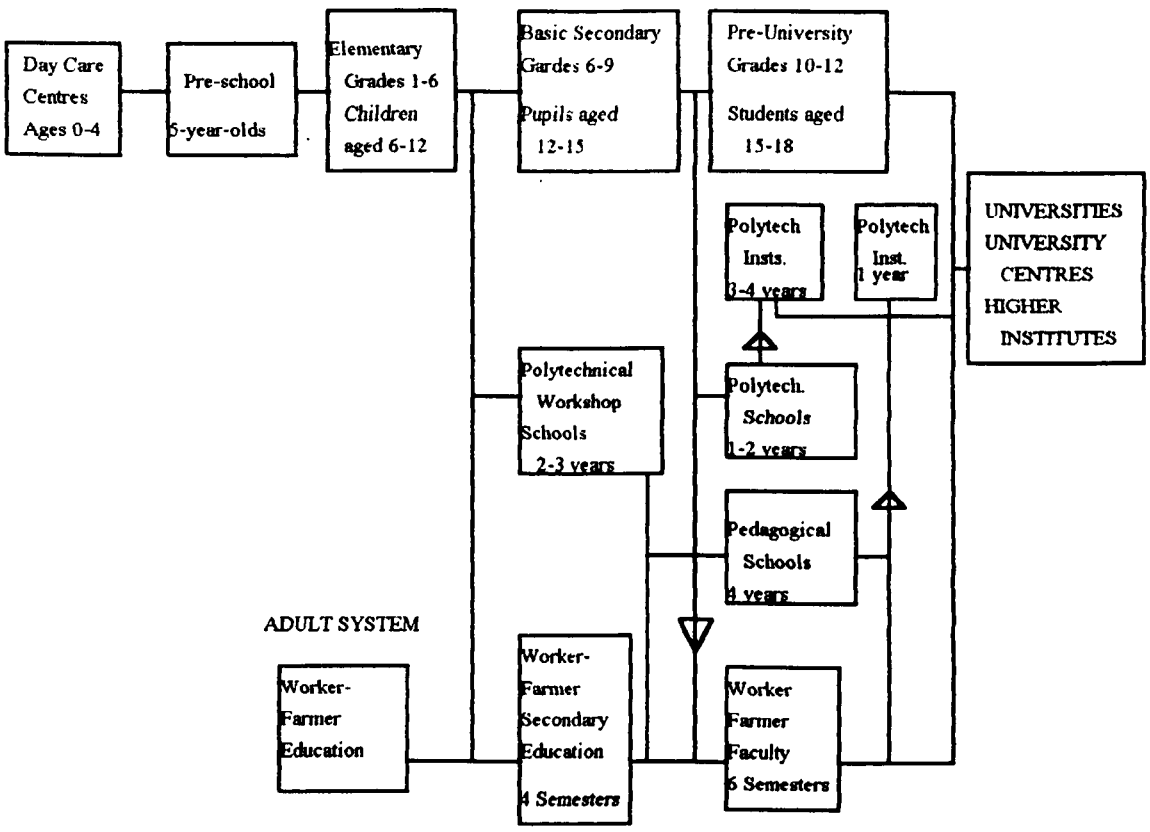
> (i) to strengthen the role of the school as a centre for the development of the multilateral and harmonious personality of children and young people;
> (ii) to constantly increase the quality of teaching and education;
> (iii) to continue the work to improve the efficiency of the National System of Education to the achievement of optimum promotion rates and course retention;
> (iv) to raise the scientific and ideological preparation of the teaching staff;
> (v) to raise pre-school education to a qualitatively high level and to extend its services considerably;
> (vi) to give specialised care to the greatest possible number of physically and mentally handicapped children and young people;
> (vii) to implement compulsory education up to the ninth grade;

(viii) to pay more attention to the training of skilled workers and mid-level technicians to meet the present and future needs of the domestic economy;
(ix) to spare no effort to improve the quality and fulfilment of the curriculum for higher education;
(x) to raise the level of education for all workers up to the ninth grade.

2.8.3 The Structure of Education in Cuba

Figure 2.5 describes the structure of education in Cuba. The emphases given to pre-school and to adult education are significant and the articulation between adult education and the regular system of education, too.

FIGURE 2.5: THE STRUCTURE OF CUBA'S EDUCATIONAL SYSTEM 1981



SOURCE: International Handbook of Education Systems, p.711.

Cuban education has two parallel structures: a the regular system which caters for young children and young people in pre-primary, elementary, basic secondary, upper secondary and higher education institutions and a parallel adult system of education responsible for providing education in elementary, lower secondary and upper level secondary institutions. This adult system also provides access to regular system higher education facilities.

Compulsory education begins at the age of 6 years, after a Day Care period of 0-4 years and a one-year pre-primary grade. There are 6 grades of elementary school followed by a three-grade Basic Secondary School. However, there is provision for pupils who have dropped out of elementary schools or are educationally retarded to attend two- or three-year polytechnical schools. Upper Secondary level education occurs in pre-university institutions in four-year primary teacher training schools and two types of vocational institutions: either three- or four-year polytechnical institutes, or one- or two-year polytechnical schools. Also, there is a one-year polytechnical institute between upper secondary school and higher education level. Higher education is provided in University Centres and Higher Institutes (Fig. 2.5).

Although access to Day Care Centres is still limited, these Centres perform very important functions. They help the early development and education of young children and enable more mothers to go to work or take active role in society. They are used as experimental institutes and a new curriculum has been designed

with more formal institutional content to prepare the children for elementary schooling. The pre-schools are not associated with the Day Care Centres; they are fully incorporated into primary education (Cowen and McLean, 1984).

2.8.4 Organisation of the Education System

The elementary school year lasts for 40 weeks, broken into 4 terms of 10 weeks each. Similarly, the rural secondary school year lasts for 40 weeks but is broken into 2 semesters of 20 weeks each. On the other hand, the urban secondary school year lasts for 34 weeks, split into 2 semesters of 16 and 18 weeks. These two semesters are supplemented by a period for productive activities in the rural areas.

Elementary education is controlled by the state, is coeducational and is usually day-time , though some schools are half-boarding in the remote areas in order to help children with social difficulties.

Promotion from Grade 2 onwards is based on attainment and grade repetition occurs for those who fail to reach the standard. In order to properly monitor the progress of the pupils and ensure that they meet the promotion criteria, elementary school education was divided into two cycles in 1978 and the same teacher takes all subjects in the first cycle and moves with the class until the end of Grade 4.

The curriculum for the first cycle of elementary education places emphasis on the provision of a sound training in the mother tongue and mathematics; developing

skills and habits necessary for independent work; inculcating a love for study; and preparing pupils for learning the content of the curriculum of the second cycle.

Cowen and McLean (1984) have noted that the second cycle of primary schooling follows a curriculum that shows some Soviet influence, e.g., school gardens are established and children are expected to work in them out of school hour throughout the school year. Other signs of Soviet influence relate to the use of terms such as General Polytechnic and Labour Education which covers the whole period of schooling from the first to the twelfth grades and the allocation of time decreed for each period of study, e.g., Science - 39.22 per cent of the time; Humanities - 37.3 per cent; Aesthetic 3.21 per cent; Workshop education - 18.96 per cent; Electives - 1.29 per cent. However, the academic content at the second cycle is contained in a separate syllabus for each subject, similar to what prevails in Western Europe. Out-of-school activities are also based on the Soviet model.

Secondary education consists of lower secondary and upper secondary. Lower secondary (basic secondary education) comprises three grades - Grades 7 to 9. About 97 per cent of Grade 6 pupils have access to this level of education. Upper secondary or pre-university education also comprises three grades - grade 10 to 12. Education at this level may be general or provided in technical and vocational schools. There are Workshop Schools of the Youth Movement whose function is to provide trade training and also give a general education to children aged 13 to 16 who either dropped out of school or lagged behind in their work.

Entry to basic and upper secondary education is by passing tests taken at the end of the final grade of the preceding level. This is also true for higher education. The tests are nationally controlled and the Ministry of Education is responsible for their administration. The marks obtained in the national tests are added to marks gained in regular internal tests. Despite this rigorous testing procedures, a very high proportion of the relevant age groups proceed to lower secondary schools. Cowen and McLean (1984) attribute incidence of drop-outs to early marriage.

Lower secondary schools are run in the same manner as primary schools. However, countryside lower secondary schools are often boarding schools and emphasise work study programmes. Students in these schools provide labour for agricultural harvests such as citrus fruits, tobacco and coffee. Urban lower secondary and upper secondary school students spend 45 days each year on 'a school goes to the countryside' programme of agricultural work. Also, political and ideological training (Marxism/Leninism) is stronger at upper secondary school levels of education.

Pre-university institutions provide general upper secondary education in Grades 10, 11 and 12. Entry is by selection based on students' cumulative record plus ninth grade national tests and is alternative to elementary teacher training and other vocational and technical courses. About a third of all students in ninth grade continue to pre-university institutes and most of the rest go on to other types of institutes. Academic upper secondary education has been suppressed from

achieving the numerical predominance in Cuba as it has in Latin American countries.

The curriculum of the pre-university institutes is as in basic secondary education with additional work study, political education and cultural and physical education elements. Technical-military training is now also part of the senior secondary school curriculum.

Most ninth grade students enter vocational and technical institutions. These institutions are polytechnical schools which give one- or two-year skilled labour training, and polytechnical institutes which provide the full grade general education needed for entry to higher education institutions.

2.8.5 Adult Education in Cuba

Adult education institutions in Cuba exist in parallel to the regular system of education. There are worker-farmer education institutions which provide elementary level education up to the Grade 6 equivalent. The course consists of four grades, each of which lasts one semester. The elementary level education is followed by worker-farmer secondary level and grades equivalent to lower secondary education and preparing workers for entry to polytechnical institutes and schools. From 1981 to 1986, the emphasis was on providing worker-farmer secondary level education up to grade nine in order to raise the general educational attainment of the whole population to lower secondary level.

Further worker-farmer education is provided at pre-university level in six grades. This makes it possible for adults to enter higher education. Also, language schools provide foreign language courses for workers and special courses for cadres in political mass organisation and in marine fishing studies.

2.8.6 Higher Education in Cuba

Higher education has also undergone educational reforms in Cuba. It expanded in the 1960s and 1970s. Post-1959 Cuba saw universities as crucial for training the technical specialists needed for rapid social and economic change. Also, universities were expected to play a key role in developing a new socialist man.

According to Cowen and McLean (1984), selection of students for university education is on the basis of Grade 12 academic achievement in addition to higher education entrance examinations and ideological/political records. Scholarships are awarded to students but student admissions are tied to 'precise manpower requirements'. The Soviet model of highly specialised technical courses is preferred to the generalist Latin American tradition. Marxist/Leninist ideological courses and productive work activities are compulsory.

Cowen and McLean have also reported that the major change in Cuban higher education has been a shift towards mature, adult and part-time students. Students can enter higher education institutes from adult education institutions. Moreover, higher education students can study part time whilst working.

2.8.7 Administration of Education in Cuba

The centralised system of educational administration of the pre-revolution period has been modified. While central agencies still exercise much power, the Assembly of People's Power has influence at the provincial and local levels.

At the centre of educational administration are the Ministry of Education and the Ministry of Higher Education implements government educational policy through provincial and municipal education offices.

The provincial and municipal education offices are responsible to provincial and municipal Assemblies of People's Power in matters concerning the provision of education. At the same time they are responsible to the Ministry of Education in normative and methodological matters including general principles of education, teaching methods, curriculum content and teacher training.

The formulation of national education policy is undertaken by national representative and executive institutions, such as the National Assembly of People's Power, the Council of State and the Council of Ministers. Linkages between the education sector plan and other sectors of the economy are spelt out in five-year national plans.

2.8.8 Potential, Prospects and Lessons of Educational Reform in Cuba

Cuba's educational development since 1959 has been impressive. Because of the high priority given to education and the high proportion of national income devoted to it, universal elementary and universal lower secondary education, too, have been achieved.

Cowen and McLean (1984) have noted that Cuba now faces educational issues similar to those of many industrial countries with comparable levels of education. She is now concerned mainly with improving quality. In several respects, despite her status as an economically under-developed country, Cuba is considered to have a mature educational system. This is why several Third World countries, including Ghana, sent their children to be educated there in the 1980s.

One area in which Cuba has made tremendous progress through her educational endeavours is in the area of health. In 1959, there were 6,300 physicians serving a population of 8 million people. By 1962, three thousand of these physicians had emigrated to the US. However, thanks to the educational reforms of the 1970s which emphasised the study of science, 30 per cent of all university students were studying medicine by 1971. And by 1979, Cuba had 9,800 physicians for a population of 9.9 million people (Gillis *et al*, 1983). According to the World Bank (1990) Cuba's population: physician ratio is 530.

Life expectancy in Cuba in 1990 was 75.9 years as against 67.1 in the 1960s. In this regard, Cuba is clearly with the most advanced industrial nations. There is also a dramatic fall in infant mortality from 38.4 per 1,000 live births in the 1960s to only 11.9 in 1990. Between 1960 and 1990, due to the improvement of access to education, more women have received more education (World Bank, 1991: 55).

Another successful aspect of Cuba's educational reform is the organisation of work study programmes. This has helped in reducing adult illiteracy and allowed working people and farmers to improve their skills and enlarge their knowledge without having to give up their jobs. For the youth, work study programmes have inculcated in them the dignity of labour and helped suppress the desire for purely academic education.

In retrospect, one can associate the successful implementation of the educational reform programmes to an apparently systematic use of the various approaches to innovation at the appropriate times. First, the systems approach is evident. This is because during the reform period, the schools were seen as a subsystem of a wider system that had formally specified goals generated by the political authority outside the education system. The educational reform involved the design of educational programmes to achieve these goals. But the bureaucratic approach is also evident. This is illustrated by the power-coercive nature of the implementation and the dissemination of information from top down backed by

political and professional power. Then the personality of Fidel Castro and his involvement in initiating and implementing the reforms point to the evidence of the charismatic approach.

As the reform progressed problem-solving approaches became apparent and diffusionist approaches, too. These are illustrated by the role that in-service training centres and experimental institutions have played in the reform process. A continual search for improving the quality of education shows that the scientific approach is also evident. This is so because curriculum materials and teaching methods now tend to be based on solid research.

From the foregoing it can be seen that Cuba is one developing country that seems to have developed an educational system that synchronises with its economic and social demands. But the Cuban model cannot be easily adopted by other developing countries, as it is only practicable in the context of wide-ranging reforms including educational, economic and social structures.

2.9 Brazil 's Experience in Educational Reform

Brazil's mixed economic fortunes coupled with democratic pressures have made it difficult for her to adapt education to suit her needs. These fundamental problems have been exacerbated by strong historical influences of both European ideas and those of the Church.

2.9.1 Major Educational Reform Programmes in Brazil

The first major educational reform since the Jesuits introduced education in Brazil began with the passing of the Basic Education Law of 1961 which defined the principles and structure of the national education system. Further definitions of scope were given in respect of higher education in 1968 and for primary and secondary education in 1971 (Cowen and McLean, 1984).

Because of Brazil's dependence on Europe, particularly France, in the nineteenth century, she was handed an education system with a European tradition based on an elitist and humanistic tradition. (Cowen and McLean, 1984: 566).

Because of this philosophy of education, the educational system was rigidly centralised until 1961. Also, curricula were encyclopaedic and emphasis was on standards and examinations designed to sieve out those of mediocre intellectual ability.

But post-war Brazilian society could not accommodate this elitist and humanistic philosophy because the society had developed an insatiable demand for education, especially when the populace realised that universal schooling was both a human right and a point of national pride. Therefore the rapid expansion of facilities and liberalising the curriculum became a national priority, culminating in educatioal reforms.

One such educational reform was implemented in 1961 to decentralise the administration of education. This was quite successful. But the concepts underlying education remained intact, so that the decentralisation by itself had little impact in the schools. So the revolution of 1964 had to introduce an extra dimension to take care of planning and manpower needs. Central control was reasserted and the people of Brazil began to see education as an investment expected to yield dividends in the form of scientific research findings, technical skills and the knowledge and tools required to accelerate the country's development. Such notions about the potential roles of education demanded even more substantial reforms.

By the Basic Law of 1961, educational planning was the responsibility of respective State and Federal Councils of Education. But such planning was restricted to the disbursement of funds and the setting of generally accepted targets rather than with an in-depth assessment of problems, resources and realities. The Revolution of 1964 insisted on planning to provide the blueprint for economic development and education and all facts of national life were expected to play their parts. Consequently, in 1967, the Ministry of Planning enunciated its ten-year Development Plan which outlined general but clear educational goals. It emphasised the need to strive for greater efficiency, improved output, more relevant curricula for social change and economic progress and the production of skilled manpower for the economy. These were reaffirmed in the 1975-79 Development Plan.

2.9.4 Trends, Prospects, Potential and Lessons of Brazilian Education

As noted by Cowen and McLean (1984), because of her vast size and disparities in enrolment, Brazil has a bright and, also, a rather dark side of her education, and hence her social and economic development. There are urban, progressive regions with European tradition and industrial bases which show trends associated with Western Europe: a longer period and level of education; a more uniform curriculum followed at the upper first level; and a tendency to postpone specialisation until the second cycle.

In addition there are clear signs of university involvement in developmental problems. Furthermore, significant advances have been made in science teaching and in the quality of research.

Against these progressive aspects is a feature that puts Brazilian education into the category of typical developing countries: namely, a phenomenal increase in demand for and provision of education matched by a fall in quality.

Other areas of difficulty may be put under the headings of internal efficiency and external relevance. Problems related to internal efficiency include serious shortage and unequal distribution of facilities; high dropout, repeater and failure rates; lack of "articulation" between levels of the system; shortage of trained teachers at all levels; encyclopaedic curricula; formalistic teaching methods; inappropriate educational aims and concepts.

With regard to external relevance, the curriculum is academic and has no practical orientation. Also there is a humanistic bias at higher level. This results in shortages of technicians, doctors, scientists, etc.

On the whole, recent economic and social indicators of development reflect the persistence of the above problems. For example, the population:physician ratio remains high at 1,080 as against 938 for the Latin America and Caribbean regions. Also, the tertiary:science or engineering students ratio is 17.8 (World Bank, 1990). These figures illustrate the educational reforms have not been able to kill the humanistic bias and not adequate numbers of scientists are being trained.

Masland (1993) also highlights the inequities in the Brazilian educational system. According to him, the illiteracy rate among black Brazilians is twice that of whites - a situation that has been aggravated by Brazil having the worst income distribution in Latin America. He claims that the richest tenth of Brazilians control nearly half of the country's wealth and the poorest tenth - virtually non-white - own less than one per cent. Thus, it seems that Brazil still has a long way to go in her efforts to democratise education and build an egalitarian society.

However, there is evidence that on the average, education of Brazilian labour force has had a statistically significant effect on the country's output, especially during the decade of the 1970s when Brazil experienced a period of extremely

rapid growth. Lau *et al* (1993), using data from individual Brazilian states in 1970 and 1980, estimated an aggregate meta-production function relating to aggregate real output of each state to capital, labour, average education and time. The study showed that one additional year of average education increases output by approximately 20 per cent. But the study also indicated that the large measured effect of education may be due to the existence of a threshold effect in average education between 3 or 4 years (Lau, 1990)

Moreover, of the four sources of growth, technical progress accounted for 40 per cent of the Brazilian output in the 1970s. Human capital accounted for about 25 per cent, while physical capital and labour accounted for the remainder.

Given the existence of a threshold effect, Lau and his colleagues (1993) feel that, subject to the results of a more detailed study, a more egalitarian distribution of average education is a favourable option. This observation is pertinent in view of the inequities of Brazilian educational provision and income distribution.

In conclusion, therefore, it may be said that while the educational reforms that spanned the period 1968 and 1979 did have some impact, a lot remains to be done. The question of equity appears to be what is crucial if the gap between Brazil's modern, industrial and progressive south and traditional, agricultural and backward north is to be bridged.

2.10. Chile's Educational Reforms

The educational system of Chile has much in common with other Latin America countries. However, from the 1970s, shifts in emphasis have resulted in certain educational procedures and outcomes that are peculiar to Chile.

Under the Marxist government of Salvador Allende up to 1971, there were attempts to expand provision and opportunities for the poorest sections of society. After 1971 General Pinochet tried to reduce the proportional importance of higher education to make educational consumers pay for education received above the basic level. Thus, there was a clear difference in the philosophy that underlined the provision of education. From 1969 to 1971, government was committed to expanding state provision of education as a means of equalising opportunities at government expense. After this period, education in Chile was affected by a market forces philosophy.

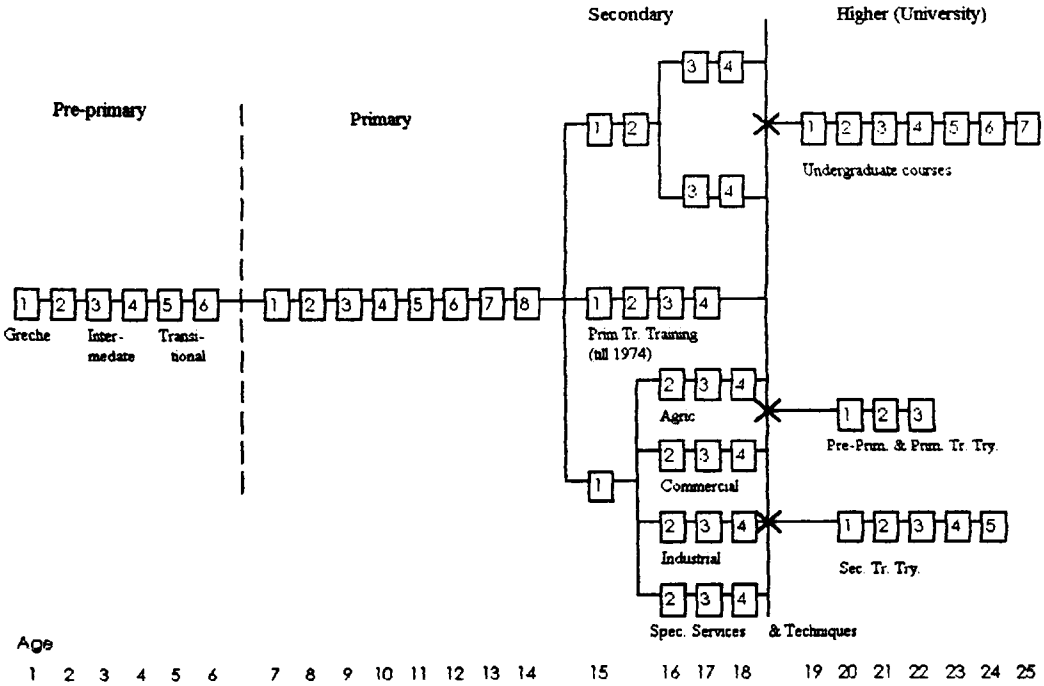
Chile provides a 7-tier elementary course without a separate lower secondary stage. Also, education is divided into traditional academic and teacher training sections together with technical and vocational branches. Higher education is provided in universities which concentrate on preparation for traditional professions.

By law, primary schooling is compulsory and universal elementary education is almost achieved. But the poorest sections of the society both in the big cities and in remote rural areas do not enjoy complete primary schooling. About half of the relevant age group are in secondary schools and about 10 per cent in universities. Also, fees are charged in state schools so that consumers pay for educational improvements. The government also follows a policy of devolution of control of primary schools to municipalities.

Chile's present system of education is described in Figure 2.6. The main features include six years of pre-primary education which begins from the cradle; an eight-year primary course; a four-year secondary course; and a 3 to 5 years undergraduate courses.

2.10.1 Chile's Present Educational System

FIG. 2.8 THE STRUCTURE OF CHILE'S EDUCATIONAL SYSTEM



SOURCE: Cowen and McLean (1984) Handbook of Educational Systems

Pre-primary education features in Chilean education. However, only a fraction of the age group attend nursery schools, and these come mainly from upper socio-economic groups. The best nursery schools are either private or sponsored by a state corporation. The private ones receive subsidies from the government. Nursery schools are non-existent in the rural areas. But there is a National Board of Kindergartens which has been trying to extend pre-primary education to the poorer groups in conjunction with health and nutrition programmes. Pre-primary education lasts for six years and comprises three stages: the cradle stage (0-2 years), medium level stage (2-4 years) and transitional stage (4-6 years).

Primary education begins from the age 6 and lasts till 13 or 14 years of age. It is free, though an annual entrance fee of about £4 is levied on each child at both primary and secondary level as a contribution to the improvement of school buildings (Cowen and McLean, 1984).

The primary school curriculum is fairly conventional and consists of reading, writing, mathematics, simple science, history, geography, social sciences, arts and crafts, music and physical education. Foreign languages (English or French) are introduced at the beginning of grade 7, or earlier in prestigious 'experimental' schools.

Primary schooling is divided into two cycles of four and three years; with the second cycle concentrating on exploratory activities and vocational orientation in an interdisciplinary approach.

Examinations at the primary level are devised internally within each school and marks are awarded on a scale of 7. Children who complete full 8 grades of primary education receive a primary school leaving certificate.

Secondary education is divided into two categories : humanistic-scientific and technico-professional. Students in the humanistic-scientific category follow 2 years of common core studies followed by 2 years of specialisation in literary, historical and social or natural sciences and mathematics. Technico-professional courses are less academic and more vocational and are divided into industrial, agricultural, commercial, and special services and techniques. Specialisation into one of these four branches begins after a common year of general studies.

The *liceos* which provide humanistic-scientific education are much more popular, and the most prestigious subjects are mathematics, natural and social sciences because success in these subjects lead to university studies in medicine, engineering and economics, which Cowen and McLean (1984) report as the most fashionable careers for middle class children. In the technico-professional schools, commercial and industrial institutes outnumber agricultural ones. The original intention was for those who completed these courses to move into industry, agriculture and commerce at the technician level. But in practice, the majority aspire to the same university courses that form the objective of those in the humanistic - scientific schools.

Students who complete 4 grades of secondary education get the secondary school leaving certificate with which they may obtain 'white collar' employment.

Higher education is provided by 8 universities of which 3 are catholic universities, 3 private and 2 public. Undergraduate courses vary in length, ranging between 2.5 to 7 years, with a 5-year course as the norm (Cowen and McLean 1984). Postgraduate courses vary from one-year diploma to doctorates requiring 3 years of study. Specialisation in medicine is well represented.

Entrance to undergraduate courses is based on multiple choice examination (***Prueba de Aptitud Académica***) taken nationally and is valid for all universities in Chile. An additional test - ***Prueba de conocimientos*** (Test of Specific Knowledge) - in one of four areas including mathematics, natural sciences, social sciences, and arts is also administered. Also, account is taken of students' average marks obtained in secondary school.

According to Cowen and McLean (1984), four general principles were used to rationalise Chilean universities in 1976. First, university autonomy was restricted to giving the universities freedom to decide all matters concerning teaching, research, administration and extension, provided decisions kept within government's university policy and the law. Second, all university activities were to be conducted within the framework of the national development policy. Third, each university was expected to prepare its own plans and programmes in line with national development needs. And, fourth, universities were expected to co-operate with each other to avoid duplication and wasteful competition.

2.10.2 Highlights of Chile's Educational Reform Efforts

The major educational reform efforts of the past three decades began with the appointment of a Commission - *La Comisión de Plancamiento Integral de la Educación*- to study the educational needs of Chile. In 1965, the implementation of the recommendations of this Commission was begun. The aims were to modernise the system, improve the training of teachers, eliminate educational inequities and provide school buildings for 200,000 children who were not receiving any education. Frei, then President of Chile had faith in education as a vehicle for the development of Chile and was therefore committed to improving access and quality of education. Thus he was all for carrying out the recommendations of the Commission.

Frei's efforts were followed by Allende who assumed power in 1970. Allende's government's primary educational aim was to create a socialist society. Working-class infants were given 78 per cent more nursery places; the standard of university entrance was lowered to allow students without full entrance requirements to gain admission; free meals and lodging, loans and scholarships were offered to students of working - class origin; adult education places were expanded in order to combat illiteracy and provide technical training for labourers. But there was no money to sustain this expansion. So severe inflation developed along with political unrest and it became impossible to undertake

normal activities, especially in universities and secondary schools. This led to the overthrow of the Allende government (Cowen and McLean, 1984).

The differences between Allende's government's and the military government's educational aims lay in three aspects:

(i) an increased emphasis on nationalism and the glories of nineteenth century Chilean military history;

(ii) the disappearance of the various courses on civics and social science due to the ban on any type of political activity;

(iii) the guarantees offered to private education, a sector which had been frequently attached under the Allende regime (Cowen and Ma Lean, 1984)

Reforms were also implemented in the field of teacher education. Before 1974, the training of pre-primary and primary school teachers was done in the Escueles Normales (Primary Teacher Training Colleges) and formed part of secondary education. Now, since 1974, pre-primary and primary teachers-in-training are expected to take a 3-year degree course at university. Those who intend to teach in secondary school pursue a 5-year university course which is divided between education subjects and the specialisation they have chosen to teach. Thus, the universities are now responsible for all teacher training. They award the trainees certificates which they refer to as degrees but which Cowen and McLean equate to the UK certificate of Education.

2.10.3 Problems, Prospects and Lessons of Chilean Education

The major problem with Chile's educational plans has been that the plans were not given sufficient time to be implemented and evaluated before the next plans were introduced.

Despite this problem, Chile's educational efforts show some healthy signs. Illiteracy rate stands at 5.6 per cent compared with 16.7 per cent for the Latin America region and 96.8 per cent of Chilean children complete at least 4 years of schooling. Moreover, Chilean workforce have completed an average of 8.1 years of schooling and the gap between male and female enrolment in primary and secondary schools has been bridged. (World Bank, 1990: 61).

One other good sign about Chilean education is that the reforms have succeeded in shifting emphasis from the humanities to the sciences. By 1978, engineering students had outnumbered students in any other discipline in Chilean universities (Cowen and McLean, 1984). This is important in view of the improvement in Chile's economic situation. The problems of technical manpower to carry though development projects will be minimised. However, the problem of middle level manpower may still have to be solved, since students in the technico-professional streams are attracted to university education rather than seeking employment after secondary education.

2.10.4 Summary of Common Themes on the Educational Reform Efforts in the selected Asian, Pacific and Latin American countries.

Expansion in educational provision has occurred in each of the countries included in the present study. There have been efforts to improve access to educational facilities for vulnerable groups in each country. However, except for Cuba, much remains to be done in this regard in the other countries.

The experiences of these countries show that the craze for higher qualifications rather than enthusiasm for vocational skills for employment in the traditional sector and in middle level positions in the modern sector of the economies of these countries, is unlikely to diminish unless deliberate efforts are made to channel school leavers with vocational skills into reserved jobs, as happened in China in the 1960s, before the Cultural Revolution. Also, as the experience of Papua New Guinea indicates, more needs to be done to change the attitudes of both pupils and parents and to motivate many school leavers to apply their skills in the traditional sector of the economy (cf. Vulliamy, 1983: 86, 87, 97). The success of Cuba supports this point and also underscores the need to concurrently pursue both social and economic transformation. This demands inter-sectoral collaboration geared towards ensuring effective linkages.

2.11 Educational Reform in Selected African Countries: *Nigeria, Zimbabwe, Zambia and Tanzania.*

Increased enrolment in primary schools have been a significant feature in the development of education in post-independence Africa. For instance, the first Egyptian Constitution made education free and compulsory on the achievement of independence in 1923; Ghana's Education Act of 1961 made education free and compulsory; Kenya made education wholly free in 1974 and Nigeria followed suit in 1976. All of these efforts were aimed at achieving universal primary education (Fafunwa and Aisiku, 1984).

The increase in primary enrolments led to greater demand for secondary education and governments were under pressure to open more secondary schools and expand existing ones in order to cater for the increasing numbers of primary school leavers aspiring for secondary education. As the numbers of secondary school leavers increased, the demand for university education also increased, triggering off a "craze for higher paper qualification" (see Dore,1976: 4ff).

Despite the expansion in education at all levels, African countries continue to experience trained manpower shortages while large armies of young school leavers remain unemployed. This suggests a need to address the issues of quality and relevance which appear to have been sacrificed in the pursuit of quantity.

Therefore, many African countries have embarked on educational programmes aimed at providing appropriate education that would foster national economic and social development.

This section reviews some of the measures that have been taken in Nigeria, Zambia, Zimbabwe and Tanzania towards providing development-oriented education. The purpose here is to establish typologies of successes or failures which may be useful in assessing the prospects and potential of the current educational reform programme that is being implemented in Ghana.

2.12 Nigeria's Educational Reform Efforts

'Western' type formal schooling in Nigeria goes back to the activities of Christian missionaries in the mid-1850s. These missionaries provided education and made decisions about education well into the present century. The colonial administration's first direct intervention came through the institution of the first Nigerian Education Code in 1926 (see Ukeje and Aisiku, 1982).

The period 1951-1960 saw great expansion of education in Nigeria. This followed the political activity that culminated in the division of the country into regions. Regional competition was probably a main factor responsible for the expansion. During the period of the Civil War (May 1967) the expansion slowed down but picked up again after the war (Ukeje and Aisiku, 1982).

Another significant feature of Nigerian education was the outcome of the 1975-80 Development Plan which favoured another boom in primary education, especially following the introduction of fee-free universal primary education in 1976.

Before 1982, secondary education was provided in Secondary Grammar Schools which were very popular and prepared students for higher education, though some secondary school leavers went into the world of work. Technical and vocational schools prepared students for middle level jobs. Other secondary educational institutions included secondary modern schools (phased out), commercial and teacher training colleges which trained primary school teachers.

Based on the objectives of the Third Development Plan the government accepted and implemented a proposal for a 6-year comprehensive secondary education system. This is the system that has been in progress since 1982 and comprises 6 years of primary schooling, 3 years of junior secondary schooling and 3 years of senior secondary schooling. At the time of its implementation, some Nigerian educationists believed that two important merits of the reform were the elimination of the 6th Form which was considered a bottleneck in Nigerian education and the opportunities of ensuring regular and relevant guidance and counselling services for proper channelling of students to appropriate areas of specialisation during the senior secondary stage (Ukeje and Aisiku, 1982: 26).

2.12.1 The Present Educational System of Nigeria

Nigeria now follows a 6-3-3 pre-university system and a four-year undergraduate university system. The reforms that were implemented in 1982 have been concentrated at the secondary sector - that is, at the Junior Secondary School (JSS) and Senior Secondary School (SSS) levels. The objective has been the vocationalisation of the curriculum.

> The JSS curriculum consists of 13 subjects, of which 12 are core subjects including two Nigerian languages and 2 pre-vocational subjects, as well as one non-vocational elective (Nwakoby, 1991). The full range of subjects offered is shown in Table 2.3

The characteristics of the JSS curriculum are:

> (a) a pre-vocational base for vocational training
> (b) an academic base for training in cognitive and academic skills
> (c) a content designed to reflect an integration of school and societal values and needs
> (d) a syllabus geared to achievements covering a range of levels of cognitive, affective and psychomotor domains
> (e) teaching/learning strategies to stimulate interest, enquiring and experimentation (Nwakoby with Lewin: 221-222).

The primary objective of the curriculum is to diversify the secondary school curriculum. This task has been tackled by introducing vocational subjects as a part of the compulsory core to be studied during the first three years of secondary school.

Table 2.3 List of Subjects in the JSS Curriculum

Core Subjects	*Pre-vocational Subjects*
Mathematics	*(Select 2)*
English	Woodwork
Nigerian Languages (2)	Metalwork
Science	Electronics
Social Studies	Mechanics
Art and Music	Local crafts
Practical agriculture	Home economics
Religious & moral educ.	Business studies
Physical education	*Non-vocational electives*
Pre-vocational subjects (2)	*(select 1 only)*
	Arabic studies
	French

SOURCE: Federal Republic of Nigeria (1981) ***National Policy on Education,*** reproduced in F. Nwakoby with K. Lewin (1991) in ***Educational Innovation in Developing Countries,*** edited by *K.M. Lewin and J.S. Stuart.*

Nwakoby with Lewin (1991) has provided evidence on three aspects of the reform programme - the conceptualisation of the innovation, the dissemination of information, and on the curriculum in action. The findings refer to a study conducted in the Anambra State.

One positive finding is that actors in the reform process perceive the innovation as a 'good thing'. They also agree that a change was necessary and have shown tenacity of purpose in carrying the implementation through. These positive attitudes about the reform are significant because the literature on educational reforms indicates that the failure of many of them can be traced to resistance by the various stakeholders in education which often culminate in the abandonment of the programme before it has had time to show results (Sinclair, 1977; Cowen and McLean, 1984; Thompson, 1981). So the commitment of the people in

carrying through the programme shows that there are prospects that the innovations will continue and time will be allowed to correct the mistakes as they crop up.

This positive perception of the innovation aside, Nwakoby (1991) has identified a number of gaps relating to the clarification of concepts, the management of the implementation stage, organisational structures and implementation at the grassroots level - the classroom (p. 253). First, Nwakoby (1991) has found that key concepts were not clearly identified and the specification of problems for which the curricular reform had been chosen as solution was insignificant. Second, the assumptions which underlie the rationale for the reform were not clear. Also unclear was the specification of goals and objectives to guide appropriate curriculum design, and the curriculum as designed does and reflect the concepts, goals and objectives intended. These findings are significant because the lapses mentioned can result in false expectations whose futility will soon be obvious and thus kill the interest of parents and pupils in participating fully in the reformed education. For example, details of the research report show that while officials at the Federal Ministry of the Education had agreed that the new curriculum had a pre-vocational non-employment orientation, politicians who were not involved in the policy formulation sold the idea that "the essence of the new system was to prepare students who might not be able to go beyond the JSS level to be able to take gainful employment or proceed to technical colleges" (*Punch,* 14 February 1985, cited in Nwakoby with Lewin, 1991: 228). This

misconception also occurred at the State and the classroom levels because all along the assumptions of the policy statements were contradictory. Consequently, it was not clear whether the JSS should be terminal for the majority of students.

With regard to the management of the implementation of the reform, the report shows a lack of provision for a communication policy; an insufficient planning capacity; insufficient resource management; and an inefficient curriculum implementation.

The research also revealed that the development and coordination of existing organisational structures within the education systems at the Federal and State system levels for implementing the innovation were insufficient. Also found to be insufficient was the capacity of the organisational structures in integrating available structures to achieve stronger cohesion within the school and also in establishing linkages between school and society.

Furthermore, Nwakoby with Lewin (1991) has found the implementation of the reform at the classroom level inadequate because there was no change in teaching styles; there was no understanding of the new aims; teachers were unwilling to adopt materials; no use was being made of the environment; and the teachers were unable to integrate the curricula.

Another piece of research on the Nigerian educational reform implemented in 1982 is reported by Adamu (1991). His study shows that the intellectual advancement of the students of science at the JSS level has not emerged because of lack of clear specification of how the science project could achieve the outcomes associated with the use of science in personal and social development. Adamu attributes this state of affairs to the lack of correlation between the way the students are taught and the emphasis in science teaching expected by the developers of the science curriculum. Adamu's findings corroborate those of Nwakoby with Lewin (1991), especially in matters relating to change in teaching styles, the understanding of new aims, willingness to adopt materials and use the local environment, and the ability to integrate curricula.

Adamu's research further corroborates that of Nwakoby who found the organisational structures for the implementation of the reform programme inadequate. For example, Adamu has noted that:

> a political rationale for educational change strategies in Nigeria provided a suitable basis for projecting beliefs about social progress, but little attention was paid to how these strategies would be sustained, or how they fitted to social realities (p. 90).

What makes this conclusion significant is that developing countries tend to rely on administrative initiative for curricular reforms. So if the administrative set up is not stable, then the achievement of development goals through curricular reforms will be jeopardised, more especially if the actors at the grassroots level cannot or

are unwilling to implement the programme according to the original objectives of the programme.

2.12.3 Prospects, Potential and Lessons from the Nigerian Experience

From the conclusions of these two studies on the 1982 educational reform programme in Nigeria, it is clear that much remains to be done. The structural, geographical and distributional changes that the reform was expected to achieve at the beginning had not been realised after ten years. Recent social and economic indicators indicate that illiteracy still stands at 57.6 per cent, which is above the weighted average for Sub-Saharan Africa (53.4 per cent). Also, female participation is secondary education is still very low and so is the proportion of students enrolled in science and engineering courses at the tertiary level (World Bank, 1990).

The prospects and potential of the Nigerian reformed education to contribute to the country's development, therefore, depends on the ability of the government and the education authorities to fill in the gaps identified by researchers such as Adamu and Nwakoby whose works are cited in the present section.

2.13 Educational Policies in Zambia and Zimbabwe

Colonial educational policies in Zambia and Zimbabwe were similar. Educational provision for the black majority was mainly undertaken by missionaries. It was only towards the end of the colonial period that missionary schools increasingly received government grants and some schools were established in the urban areas to cater for blacks. Generally, mass education for the black population was not encouraged because many white settlers and colonial civil servants considered educational provision for the black people potentially dangerous.(cf. Bacchus, 1987: 23).

Because of the colonial administration's attitude to educational provision, very poor foundation had been made at independence. For example, at Zambia's independence in 1964, only 961 African pupils had been successful in the school certificate examination. No university had been provided during the 70 years of colonial rule; the population was largely illiterate and there was a serious shortage of skilled manpower to support the young independent nation (Graham-Brown, 1991).

Graham-Brown (1991) further notes that the situation was not different in Zimbabwe when it eventually retrieved its independence in 1980. Very little had been done in the field of education under the white minority regime. Worse still, schools and other infrastructure had been destroyed during the political struggle.

Against this background, therefore, the Zimbabwe African National Union (ZANU) government which came to power in 1980 embarked on expanding access to education to abolishing the racial bias of the previous system. Mugabe, the President, spelt out these objectives when he commented in 1981 as follows:

> In Zimbabwe today, education must fundamentally orient itself towards the revolutionary transformation now taking place in many spheres of our society. Education must, at all costs, eschew all tendencies or even appearances of a commitment to the maintenance and reproduction of the unjust social order and undemocratic value system to the overthrow of which we sacrificed so much in the struggle. It must be designed to constitute an essential component of those forces making for positive change in our country (Unicef, 1989: 11-12, quoted in Graham-Brown, 1991: 88).

So education was given priority which reflected in increased government spending in that sector. However, the government emphasised, from the outset, the role of the community in financing education and therefore has not had to shoulder all the costs of expanding education. Primary education became free and compulsory in 1980 but all secondary schools have continued to charge fees. The government only directly controls and funds about 6 per cent of primary schools and about 13 per cent of secondary schools - paying for maintenance, teachers' salaries and equipment. Parents pay tuition fees at the secondary level and pay a general-purpose fee for extra-curricula and additional facilities at all levels, in accordance with the status of the school, i.e., whether it is primary, secondary, day or boarding. Majority of the schools receive grants-in-aid and are run by district councils or missions. There are a few 'elite' schools (former white boarding schools). The government pays teachers' salaries in the district council schools and

provides grants to cover tuition fees and a quarter of the cost of putting up new school buildings (Graham-Brown, 1991).

The measures taken in the 1980s led to phenomenal expansion at both the primary and secondary levels, with primary schools increasing by 178 per cent and the number of pupils increasing by 950 per cent between 1979 and 1989 (see Graham-Brown, 1991: 91).

The very rapid expansion of the education system has left support systems lagging behind and, in some cases, has exacerbated inequities that it had set out to correct. While there are flourishing schools which reflect the affluence of a portion of the population, there are other schools with very poor facilities, since families have to bear a good deal of the cost of basic school materials and other educational equipment.

There was general concern about the number and quality of trained teachers. The trained teachers were not only fewer than required, but were improperly trained to function as 'agents of change'. Consequently, measures known as the New Teacher Training Initiatives were to address the problems of teacher shortage and the quality of teacher training.

2.13.1 New Teacher Training Initiatives in Zimbabwe

New teacher training programmes were launched to provide a large proportion of teachers with training on the job. This approach was expected to save on training facilities and help fill the gaps in the ranks of the existing teaching force.

The first training programme, called Zintec (National Teacher Education Course) started in 1981. It was of 4 years duration and had only 2 terms of formal instruction - the first and the last. During the rest of the time, the students were paid a salary and deployed to teach in schools throughout the country. They were provided with back-up distance learning materials and were visited periodically by staff from the National Centre. On graduation, they received a university accredited certificate.

In the mid-1980s, the rapid growth in secondary education led to the introduction of a modified version of the Zintec programme for non-university secondary school teacher training based in teacher training colleges around the country. The training involved 2 years (the first and the last) at college, and 2 years teaching in schools. It is the responsibility of individual colleges to prepare training materials and supervise students.

Like Zintec 1981, the mid-1980s Zintec programme has had the merit of facilitating teacher training in a short period. However, there were peculiar problems associated with the latter programme such as:

(i) the lack of capacity by the training colleges to adequately supervise scattered students;
(ii) ineffective distance education because of poor communications and support for the learners -- the first Zintec programme performed better in this regard because it had a central distance learning unit;
(iii) teachers in rural schools, especially district council schools, received no back-up, no library facilities, books and all kinds of teaching aids, especially for practical subjects;
(iv) many schools were headed by 'teachers in charge' who only had primary teacher qualifications;
(v) distance learning materials were often late in getting to the student and supervisors visits were few - about once a year (Graham-Brown, 1991: 100).

Students enrolled on the second Zintec programme suffered isolation in the rural areas. Such an experience tended to make students disillusioned about teaching in a rural area where qualified teachers are needed most.

2.13.2 Prospects, Potential, Problems and Lessons of Zimbabwe's Educational Efforts

Some successes have been achieved in minimising racial inequities through increasing access to education. However, the measures that have been adopted to ensure access are no longer proving adequate for the poorer sections of the Zimbabwean society, because education has tended to facilitate the development of new class structures. Since the financial standing of family is a function of the level of funding that a school can have, there is a great variation in the quality of schools. The 'Group A' schools are former white schools. These schools continue to exist because of the government's decision not to reduce the privileges of professionals and industrialists for fear of losing them. Rather, the government has

chosen to make them pay for any such privileges so that it could then use the funds to level up for those in less privileged positions.

However, economic growth has been slow and so the levelling up process for the disadvantaged has been limited. This has culminated in an inevitable class differentiation which, in turn, has resulted in a major disadvantage in that wealthier parents provide good school facilities for their children while the children of poorer parents have to be content with poorly equipped schools. Even the establishment of a Disadvantaged School Programme to provide capital development for communities which are extremely poor has not adequately resolved the problem (Chung, 1990: 16; Graham-Brown, 1991: 101).

Graham-Brown (1991) further notes that regional differences in educational provision are also substantial, e.g. Matabeleland and the North-eastern region in the Zambezi valley are far behind. Both of these areas suffered badly as a result of the liberation struggle.

Social indicators of development (World Bank, 1990) show that a majority of children attend school for all or part of the primary school cycle. What these figures never reveal is that some children of farm workers never get to school because no schools are provided on the farms. Even more worrying is the revelation that there is a high dropout rate at the transition from primary to secondary school and at the secondary school level. Graham-Brown (1991: 104)

has shown that the dropout rate is increasing. This trend has been blamed on a rise in school fees, high cost of living , poor prospects for employment and high failure rates in the 'O' level examination. Furthermore, Graham-Brown (1991) notes that at the secondary level the dropout rate for girls is high and fewer girls reach fourth to sixth form than was the case in the 1970s.

The dropout problem has serious implications for the development of high level manpower to cater for the future needs of the economy. Already, indicators such as population per physician and population per nurse ratios have worsened during the past decade. Yet only 5 per cent of students in tertiary education are in science and engineering (World Bank, 1990).

Another problem is that employment in the formal sector has stagnated. But even more serious is the fact that where job opportunities exist, school leavers have not got the specific skills to avail themselves of these job openings..

Admittedly, some attempts have been made in the field of curricular reform. For example, the Zimbabwe Scientific Programme (ZIMSCI) project was designated to support teachers not trained in science and to provide a complete science package with low-cost kits for the first years of secondary school. The scheme was considered to be successful. But the goal of independent practical work by students has largely not been achieved (Graham-Brown, 1991).

The curriculum is still largely geared towards a very academic style of learning, with upper primary and secondary school conducted in English. Examinations are tailored to be selective and do not provide for a wide range of academic ability among the candidates. Moreover, there is no concession to the use of the second language. Consequently, failure rates are alarmingly high - up to 90 per cent. This leads to frustration and a sense of failure, especially since a school leaver must have 5 'O' level passes to qualify for the few white-collar jobs.

It is over ten years since measures were taken to solve the problem of unemployment among school leavers but to no avail. Soon after independence in 1980, "Education with Production" programme was introduced to generate income from schools. It was quite successful in rural schools; but in many urban schools, gardening or manual work were generally regarded both by pupils and teachers as a form of punishment. Besides this, agricultural activities were hampered by widespread drought in the mid-1980s (Graham-Brown, 1991).

Again from the mid-1980s, the government introduced a more wide-ranging change in the curriculum. This required all secondary schools to do more 'practical' subjects. As Graham-Brown (1991) has observed, this measure too has run into some difficulties, notably among which are the cost of equipment needed for practical teaching in all schools and lack of funds to provide equipment needed for practical teaching in all schools and lack of funds to provide equipment for training the teachers. Also, there still exists a strong influence of prejudice against

vocational education which is associated with the discriminatory policy of the white regime.

The major lesson from the Zimbabwean experience is that educational reform aimed at democratising education and producing school leavers with appropriate skills implies substantial expenditure by government at all levels. Any attempt to shift a major part of the cost burden to parents will result in discrepancies and over-production in those areas which parents associate with prestige but which would not support economic and social development.

2.13.3 Prospects, Potential, Problems and Lessons of Zambian Educational Policy

During the 1980s the price of copper fell and the government's funding power was weakened . Despite this Zambia has remained one of the countries in which the government has tried to sustain expenditure on education. Education's share in GDP did not fall though in real terms considerable cuts have had to be made, and under these financial constraints, pressure groups within the tertiary education sector forced the government to apply more funds to secondary and tertiary education and less to primary education - a measure which contradicts the Government's decision to give priority to primary education (Lulat, 1982; Graham-Brown, 1991).

The school curriculum continued to be highly academic. And in the 1970s, proposals were made to reorientate the ten-year basic education programme away from its highly academic content towards more practical and vocational aspects. The proposals also sought to strengthen education with production. However, because of economic difficulties, these reforms could not be systematically implemented in the Self Help Action Programme in Education (SHAPE) project.

2 .13. 4 The SHAPE Project

The SHAPE project was launched in 1985 under the auspices of the Ministries of Education, Youth and Higher Education. Its aims were to strengthen teacher competence at the local level by encouraging teachers, head teachers and local administrators to initiate their own production work linked to teaching and to evolve their own techniques and materials.

SHAPE is as an experimental project in pre-service teacher training colleges. It has met with great enthusiasm, though Graham-Brown (1991) has reported some initial resistance from some teachers and parents who favour a more academic approach to teaching and learning. Also, it has suffered from poor linkage in the schools between production and learning and from lack of space in some schools for production purposes.

Moreover, liaison and back-up from the regional and national levels of the SHAPE are weak, partly because of geographical and economic factors which

make it impossible for inspectors and SHAPE co-ordinators to keep in touch with the schools.

The administrative problems of SHAPE are part of the general problems associated with the deployment teaching staff and supervisory personnel. The economic situation largely accounts for the problem. In some cases, government has no money to attract and retain competent teachers while in other cases, teachers desert their classrooms to search for consumer goods for their families. Moreover, administrative distortions make some teachers overwork while others are grossly underemployed (see Graham-Brown, 1991: 97).

Because of unfavourable economic conditions, Zambia has had to rely on external aid to finance what was meant to be a self-help programme. Unless internal funds can be generated to facilitate the countrywide implementation of the project, the current reforms are unlikely to contribute to the development of the country since the entire project is likely to come to a halt when the financial help from the Scandinavian countries and the British Council is no longer forthcoming.

Measures of social indicators of development show that the huge investment that Zambia made in the development of human capital in the first decade after independence has paid off: school enrolment has improved, as have the population:physician and population:nurse ratios, and infant mortality, too - though still quite high. But the data also show that participation in secondary

education remains low for both boys and girls and there is a decline in the proportion of tertiary students in science and engineering (World Bank, 1991). Economic conditions do not favour expansion in areas that will lead to expectations for white-collar jobs in the public sector. So it appears that if the bottlenecks in the SHAPE project are removed, education will have prospects of producing appropriate manpower for the dualistic economy of Zambia. SHAPE has potential as the means by which the quality of life in the rural areas can be improved as as well as a way by which Zambia can diversify her economy.

The Zambian experience again highlights the common problems of improper planning and lack of linkages among subsystems. It also shows that resistance to educational innovation must never be taken for granted.

2.14 The experience of Tanzania in Educational Reform

Education in Tanzania during the colonial period and during the first ten years after independence (in 1961) was not different from what obtained in other former British colonies in Africa. Missionaries played a leading role and there was an expansion in educational provision in the 1960s. It was in the 1970s that Tanzania attracted the attention of educationists and politicians, when she campaigned for self-reliance via educational reform.

2.14.1 Educational reform Initiatives in Tanzania

The Government of Tanzania found the education system bequeathed to it by the colonial administration inadequate and inappropriate. In his book, ***Freedom and Socialism***, Julius Nyerere, the country's first President, gives four reasons why the system of education the nation inherited was not serving the purposes of Tanzania. His first reason is that the education provided by that system was basically elitist: that it was designed to meet the interest of a very small proportion of those who had access to the school system.

Nyerere's second complaint against the former educational system is that it divorced its participants from the very society that these participants were supposed to serve. This is because the school tended to be considered as set aside from society - a place where children go to avoid being farmers and being confined to living in villages.

Third, Nyerere asserts that the school gave the idea that only books or people who had been through formal education can provide "all knowledge which is worthwhile." This idea, he explained, misled children to consider their own parents as old fashioned and ignorant and, thus, miss out on picking up important knowledge and skills that could enrich their adult lives.

Fourth, he questions the morality of the education system. He accuses the system of begrudging the nation its legitimate right to the labour of "some of its healthiest and strongest young men and women." By virtue of their participation in school,

these young people failed to add value to national output and yet consumed "the output of the older and often weaker people."

These complaints against the system that was in force up to the 1960s influenced the formulation of educational policy in the 1970s. The new educational initiative was outlined within the context of general political and development objectives of the United Republic of Tanzania as a socialist state pursuing the policy of socialism and self-reliance. The policy paper that stated the government's position and intentions is what came to be known as the Arusha Declaration.

According to the Arusha Declaration, one of the important aims of the Tanzania National Union (TANU) Party was to get the government to mobilise all the country's resources for the purpose of eliminating poverty, ignorance and disease. In particular, every member of the Revolutionary Party (Chama cha Mapinduzi _ CCM) - a merger of the TANU and Afro-Shirazi Party of Zanzibar - was enjoined to endeavour to acquire more education and use it for the common good. Directives for overseeing attendance at primary and adult education were given to Party activists at all levels (Mhaiki, 1989).

The Musoma Declaration of November 1974 announced that universal primary education should be achieved by 1977. To this end, the Ministry of National Education was urged to renew its efforts towards implementing education for self-reliance, especially at the post-primary levels.

2.13.2 Highlights of the Educational Reforms in Tanzania:

(a) Primary Education

Curricular reforms were effected to orientate primary education to village life rather than to white-collar jobs and higher education. These reforms were a clear departure from the orientation of education in the colonial times and before the Arusha Declaration - an orientation which even the first Five-Year Development Plan failed to change, "since its emphasis was on expansion of secondary education and higher education with the aim of self-sufficiency in manpower by 1980" (Mhaiki, 1989). It was the second Five-Year Development Plan of 1969 which shifted attention to primary education, providing for every child who entered primary Class One to complete seven years of schooling. To this end, the competitive primary Class Four examination was abolished. Thus, the number of children in school went up by 46 per cent to 50 per cent.

Self-help played a crucial role in the implementation of the plan. The government provided buildings, manpower and materials. The communities contributed by putting up the walls of classrooms while the government provided funds for the roof, floor, windows and school materials.

Based on the principle of self-reliance, the educational reforms aimed at making primary education complete in itself. Primary education was expected to prepare children to live in villages as "progressive farmers". To ensure that the children would be old enough to take up farming on leaving school, the primary school entry age was raised to 7 or later so that the ages of school leavers would range

between 15 and 18 years. Curriculum reform was then implemented with emphasis on agricultural knowledge and skills. The curriculum consisted of farm work and production, political orientation and cultural training, with academic work being complementary to practical projects and skills.

It has been observed that there was the need to include a two-year vocational training in primary education to enable pupils to learn such skills needed in the villages as carpentry, masonry and domestic science. Mhaiki(1989: 149) has noted that "these courses have proved very useful, since these skills are badly needed in *ujamaa* (Tanzanian Socialism) villages where people construct permanent houses and want roofs, doors, tables, chairs, etc., made." The main problems in providing the vocational education envisaged were the lack of teachers with the right kind of skills, and of tools for use in the schools and for work outside the schools.

The decision by the government to achieve universal primary education by 1977 complicated the problems which the government was already grappling with regarding the implementation of the second Five-Year Development Plan in education. Thus, although the second Plan had not ended, the strategies for implementing the universal primary education proposals had to be defined in the next Five-Year Development Plan which was to start in 1978.

Mhaiki (1989) recalls that there were several problems connected with the implementation of education for self-reliance at the primary level. First, the reform of the curriculum met with resistance and criticism by the elite, parents and teachers. Second, village and town communities bore the heavy burden of self-help schemes and of making sure that children attended school. The monetary cost of self-help was substantial and caused problems in some areas. Moreover, when the government was decentralised in 1972, so that the financing of primary education was a regional affair, some regions got into serious problems because of insufficient funds. Inflation and its management added to the problems of implementation by rendering the procurement of materials difficult. Even local materials produced in the spirit of self-reliance were not always easily distributed.

(b) Secondary Education

After independence, it became important to fill all key civil-service posts with Tanzanians. So the first Development Plan sought to ensure manpower self-reliance by 1980. To this end, emphasis was placed on the expansion of secondary and higher education.

Secondary school was expected to modify its curricula and prepare students to become workers with knowledge and practical skills needed by working people in different situations of service. Therefore, the secondary school trains students not just for work in town offices but also for work in villages where practical skills, nationalism and commitment are far more important than mere theoretical

knowledge. Details of the career prospects of students who complete twelve years of schooling in any of these four areas are given in Mhaiki (1989: 151).

Each secondary school or college tries to be self-reliant in food . Each institution has production projects such as animal keeping, vegetable growing, maize production, brick making, dress making, etc. Mhaiki (1989) has reported that in 1976 revenues from self-reliance projects covered 40 per cent of school's recurrent costs.

The major problems in the implementation of the reform have been many: heavy expenditures on equipment for teaching, tools for practical work, books, materials and libraries; general shortage of money and sometimes nonavailability of supplies even when money is available; the challenges and time involved in reorientating teachers.

(c) Adult Education

Tanzanian education has been viewed as an instrument of change and development. Accordingly a system of adult education has been developed to cope with the demands of socialist development. The approach adopted has been functional adult education and lifelong education. The programme of adult and lifelong education seeks to make adults accept responsibility for development in production, health, housing and food. It also aims at helping the adult to exercise

self-control and have power over his environment and society, and also to liberate him from poverty, sickness and ignorance.

Since the declaration of 1970 as Adult Education Year by President Nyerere, administrative structures have been set up to take care of the programme. Also, materials have been provided, teachers trained, institutions established and curricula guidelines provided. Above all was the creation of a Directorate of Adult Education within the Ministry of National Education; and regional, district village and classroom adult education committees, with representatives of people from all sectors of the society, were formed.

But the programme was expensive and so its success had to depend on the spirit of self-reliance. Thus, as Mhaiki (1989) puts it: "Adults had to put up their own classrooms; existing facilities such as court-rooms, Party offices, co-operative buildings and, above all, primary schools had to be shared with their usual occupiers."

Adult education classes were held after regular school hours. The teachers included not only regular teachers but also primary and secondary school pupils and voluntary teachers, who received no pay or a small honorarium. More teachers, were trained and deployed at various levels as the programme gained acceptance. The efforts of those who worked in adult education were handsomely rewarded in kind. For example, young people who devoted their time to teaching

in adult education classes were offered the opportunity to train as regular primary school teachers. An adult education organiser and teacher is known to have won government officer status while his colleagues are rewarded with means of transport ranging from bicycles to motor cars - according to the level at which they operate.

The Ministry of Education enjoys the support of the Institute of Adult Education, the Mwanza Functional Literacy Centre and Adult education Press. In particular, the Institute of Adult Education has been very helpful in conducting courses on continuing education, training adult education organisers, running a correspondence course and in organising mass campaigns on specific topical issues.

Adult education became an important aspect of Tanzanian education, especially after the issuing of the Musoma Declaration, 1974 by which the University of Dar es Salaam became an Adult Education Institution. From 1974, "Those who qualify to go to the university have to undergo national service for a year, then work for a year or two before being admitted as mature students" (Mhaiki, 1989: 154).

(d) Teacher Education in Tanzania

Before the Musoma Declaration of 1974, teacher training was done in Teacher Training colleges. However, since 1975, because of an increase in the demand for teachers, teacher training was extended so that it could be done in colleges, villages and secondary schools. Secondary school teachers and adult education organisers are trained in the university's Department of Education.

During teacher training, the spirit of self-reliance and the participation of teachers in school production programmes are emphasised. The colleges engage in projects such as poultry, cattle raising and vegetable farming. These projects serve both as an example and an attempt to be self-reliant in food. Military training is a part and parcel of the curriculum of three of the training colleges.

In 1976, the Ministry of Education showed its concern about producing more trained teachers by deciding to start training all Form 3 and 4 students in all secondary schools as teachers. The purpose of this was to make it possible for the students to assist in teaching in primary schools near their secondary schools. It was also a way of preparing people to accept teaching in the future since "every profession has a teaching component" (Mhaiki, 1989). The programme was implemented in 1977/78 and secondary school timetables had to be adjusted and secondary school teachers prepared to cope with the changes.

learning and teaching materials by teacher trainees in the villages was poor because of transport and communication bottlenecks.

(e) Higher Education within the context of the Tanzanian Educational Reforms

The University of Dar es Salaam which became autonomous since 1970 is also increasingly pursuing the policy of self-reliance (see Mhaiki, 1989). There has been some expansion which has made it unnecessary to train more students overseas, especially at the undergraduate level.

(f) Assessment Procedures

One bold step that Tanzania took to ensure that no external force thwarted her educational reform efforts was her opting out of the East African Examinations Council which was formed in 1967 to conduct academic, technical and other examinations in Uganda, Kenya and the United Republic of Tanzania. In 1971 the Tanzanian government established a National Council to replace the East African Examinations Council.

With her own examination body it is possible for Tanzania to shape the assessment procedures to be compatible with the policy of self-reliance. Thus, at the instance of the government, the National Examination Council accepted

productive work as an essential part of education, so that productive work counts when the final success of a student is being determined.

2.14.3 Prospects, Potential, Problems and Lessons of Tanzania's Educational Reforms

Mhaiki (1989) has outlined a number of benefits associated with Tanzania's educational reform which sought to promote the self-reliance. Topping his catalogue of advantages is his conviction that education for self-reliance has fostered the inculcation of "definite and important *ujamaa* values." In particular, he asserts that the people have firmly rejected exploitation of man by man or one group by another. Also, objectionable to the people is the idea of some people going hungry while others live in luxury. Moreover, he notes that co-operation and participation in decision-making have become a habit, while political consciousness among students, teachers and the communities is very high. Furthermore, he states that manual and productive work have won respect and are now considered as an essential part of education. He also observes that communal leadership in the running of schools serves as training for students to be active in the development of their communities.

Mhaiki also feels that the curricular changes that formed part of the reform have helped to make students aware of the problems of Tanzanian society and the students' participation in the curricula is a way of preparing them to solve these problems. The changes in curricula have also helped in changing attitudes, as

exemplified by production projects in schools. The commitment of primary school teachers who are said to be the most overworked public servants in Tanzania illustrates the positive attitudes that the educational reforms have helped to develop. Finally, the courage and tenacity of purpose of the people bearing the burden of the cost of the programme shows the commitment of the actors in the educational enterprise to make education an engine of their well-being.

However, recent measures of social indicators of development do not appear to suggest that the benefits of the educational reforms mentioned above have made much difference in improving the quality of life of the people. The awareness that adult education is said to have promoted has not reflected, for example, in population trends. Population growth rate is high and increasing and infant mortality rate is high, too. Participation in secondary education is low for both boys and girls while population per physician as well as population per nurse ratios have worsened (World Bank, 1990).

The change of attitude that the reforms have helped to effect is important because the willingness of the people to participate is an important element in the successful implementation of any innovative programme. So attitudinal change does increase the potential of an educational reform in working towards the goals envisaged. However, where gaps relating to the implementation exist, the chances of the innovation producing the desired results are reduced. In the case of implementation of self-reliance in Tanzania, a number of gaps have been

identified. For example, Saunders (1982) suggests that little or no attempt was made to specify how the policy as outlined by Nyerere was to be implemented at the school level. Vulliamy (1983) adds that as a consequence of this omission,

> there was little attempt to provide in-service training on self-reliance, little attempt to provide feedback on teachers' practices and little extra provision in the way of resources to schools. Little or no direction was given as to possible ways of integrating academic and practical work, and since the reforms were not congruent with existing teacher practices, it is not surprising that there remained a marked discrepancy between theory and practice (p. 93).

Another gap related to the issue of assessment. Policy demanded that self-reliance activities by students be assessed. But such assessment is flawed. This is because in Tanzania, secondary schools are ranked nationally in every academic subject, and teachers are accountable for the performance of their students in these subjects, whereas no teacher is culpable when students fail to relate theory and practice. However, every student is required to pass his/her self-reliance assessments in order to successfully complete schooling. Therefore, "such assessments became a formality, or at best, a judge of general character or responsibility" (Vulliamy, 1983: 94).

These gaps reflect the adoption of a top-down approach and the failure to show consistency in the setting of priorities. Since the need to assess practical work is a policy decision, there is no reason why it should not feature in the overall performance of the school to make teachers feel a sense of responsibility for students' output of practical work.

2.15 Summary: Common Themes from the Educational Experiences of the Selected African Countries

The experiences of the African countries covered here have revealed certain trends. First is the absence of elements of the system approaches which are essential in ensuring the integration of activities and establishing linkages among sectors. This omission is the source of the pockets of resistance to the process of reform in some of the countries, as subsystems are not convinced about the goals of the reform.

Second, wherever there was enthusiasm in the implementation of aspects of a reform, the enthusiasm could be traced to the charisma or personality of certain politicians - in Nigeria, Awolowo, Azikiwe and Awokoya; in Zambia, Kaunda; in Zimbabwe, Mugabe; and in Tanzania, Nyerere.. Indeed, the situations in Nigeria and Tanzania appear to confirm the fear that the absence of such charismatic leaders would deal a devasting blow to the educational efforts. It seems, then, that the course educational reform is not best served by resorting only to top-down or bureaucratic approaches. Similarly, charismatic approaches can be highly unreliable, especially where economic and political conditions are unstable. In every case it appears that elements of systems approaches assisted by sensible bureacracy tend to improve the prospects of the reforms. These considerations have informed the Ghanaian study.

CHAPTER 3

EDUCATION AND DEVELOPMENT IN GHANA

3.1 Brief Historical Note

Ghana lies in the centre of the long southward facing coastline of West Africa that runs from Guinea in the west to Cameroon in the east. The coastline stretches for about 552 km along the Gulf of Guinea, with the southernmost beach lying 4½° north of the Equator. Latitude 11° marks the northern boundary of the country. Burkina Faso, la Cote d' Ivoire and Togo are Ghana's northern, western and eastern neighbours, respectively. All of these countries were colonies of France and have much ethnic ties with Ghana though they shared very little history in colonial times when it was a British colony and protectorate known as the Gold Coast.

Modern Ghana has an area of 238 537 km² and a population of 15 million. The present boundaries of Ghana and her three neighbours were arbitrarily established by France, England and Germany at the beginning of the twentieth century. In 1901 Britain annexed Ashanti to the coastal region of the Gold Coast which had been declared a protectorate. And, following the defeat of Germany in World War I, the part of Togo that was under German control became a British Mandated Territory.

Under the leadership of Dr Kwame Nkrumah and his Convention People's Party (CPP) the Gold Coast attained self-government status in 1951 and eventually became independent on 6 March 1957, with Nkrumah as Prime Minister.

In 1958, Togo also became independent and disputed border areas were added to Ghana after a United Nations plebiscite in 1960. On 1 July 1960, Ghana became a Republic with Nkrumah as President.

The new Legislative Assembly which marked the beginning of self-government was inaugurated in Accra on 20 February 1951. Wartime conditions and relatively high prices paid for cocoa on the world market in the immediate post-war years resulted in large savings to finance post-independence schemes and economic development.

The new government committed the reserves to grandiose schemes for social and economic development. But the mode and tempo of development triggered off political dissent which culminated in a coup d'état which overthrew the Nkrumah government in 1966. A second Republic was inaugurated with Dr K. A. Busia as Prime Minister in 1969. But in 1972 Busia was sacked through another coup d'état led by Colonel I. K. Acheampong. Acheampong was himself removed from office by Lt. Gen. Akuffo in 1978. Ft. Lt. Rawlings derailed Akuffo's regime in a bloody coup but handed over to a civilian government inaugurated in 1979 with Dr Hilla Limann as President and Head of State. The third Republic under Limann was again toppled by Rawlings who remained in power till January 1993 when he was installed as President under the fourth Republican Constitution.

Despite the political instability and economic difficulties, the development of education in Ghana continued. A very ambitious educational reform programme aimed at reconciling the conflicting claims of the dual economy was initiated, a modified form of which is now being implemented and is the core of the present study.

3.2 Review of Previous Educational Developments

Ghana's earliest contacts with Western education were through the forts built by European slave dealers. Such attempts were sporadic and, mostly, aimed at serving the interests of the officials and merchants concerned. Such interests included the European trading nations' desire to convert the people of the Gold Coast to Christianity; and later, the companies wanted literate Africans to work for them. Moreover, the European traders wanted to provide schooling for their sons by African women (McWilliam and Kwamena-Poh, 1975; Foster, 1965a).

Real expansion in educational provision began during the first half of the nineteenth century. The Wesleyan Methodist Missionary Society and the Basel Society played an important role in this regard. However, the early growth of schools was not strictly associated with missionary activity. The African Company of Merchants and, later, the British Crown showed interest in the development of education in the Gold Coast. Several of the early Governors wanted to see the Crown playing a greater part to ensure that "a more general course of instruction should be followed" (McWilliam and Kwamena-Poh, 1975).

The year 1852 is the watershed of colonial government intervention in the field of education in Ghana. In this year the Education Ordinance of 1852 was passed. Its objectives were to spread the benefits of education to meet the demands of an advancing society and ensure the education of the "rising number of females". It provided for the establishment of a school run by a European couple on a combined salary of £200 a year. This couple was expected to train teachers who could then open district schools. The scheme was expected to be financed by an annual sum of £1,000 set aside from the revenues of a Poll Tax instituted that year, supplemented by any other donations that the Governor might receive.

The 1852 Ordinance failed because Mr Vinall the schoolmaster suffered poor health which was worsened by the death of his wife, forcing him to retire after his first tour. Moreover, the revenue expected from the Poll Tax was not forthcoming because the people refused to pay.

So, after 1852, the missions continued to expand their institutions through their own efforts till the 1880s. During this time, attempts were made to regulate the making of grants-in-aid to mission institutions via the passing of the Education Ordinances of 1882 and 1887. Actually, these two Ordinances mainly sought to introduce an English model of education (Foster, 1965a: 81). The 1882 Ordinance was important because it legalised the partnership between the government and the Churches but it proved unworkable. Therefore it was replaced with the Ordinance of 1887.

The Ordinance of 1887 concerned the Gold Coast alone and was in operation for forty years. Its aims were to unify the education system and finance the existing systems. After 1887, two categories of schools were to be recognised by a newly-constituted Board of education - 'government' and 'assisted'. Government schools were those maintained entirely from public funds while assisted schools were those established by missions or private individuals but received government funds. To qualify for a grant, a school's curriculum had to include reading, writing, English language and arithmetic, with needlework for girls. Optional subjects such as English grammar, history and geography could also attract grants. Schools which did not meet these conditions were not prohibited but such schools, described as 'non-assisted', received no grant.

The Board made rules' governing the payment of grants, and these had the force of law. In 1902, the Board introduced the system of 'payment by results' by which the amount of a school's grant depended on the number of children in each standard who passed the annual examination conducted by the inspector of schools. According to the Rules of 1902, a grant of two shillings per pupil per year was payable for each pass in arithmetic, reading and writing. Also, grants ranging from six pence to two shillings per pupil, based on average attendance, were payable in each of the other subjects according to the inspector's examination. As McWilliam and Kwamena-Poh (1975) have pointed out, the system of payment by results encouraged rote learning and tempted managers to

overcrowd the timetable with a view to receiving a small grant for each subject without regard to the quality of teaching. Moreover, the system created animosity among the school inspectors and teachers.

Under Governor Rodger, a new set of Education Rules was designed in 1909 to improve teaching methods and diversify the primary school course. Some form of industrial or agricultural training compulsory. Also, a Government Technical School was opened in Accra. This later moved to Takoradi and eventually became the country's first secondary technical school.

The outbreak of World War I led to the deportation of the German Bremen missionaries who had been playing an important role in the provision of education. This was a great setback which, coupled with poor conditions for teachers, hastened a decline in educational standards. Thus, reforms were initiated and implemented by Sir Gordon Guggisberg, whose term of office spanned the period 1919-1927.

Guggisberg outlined his philosophy of education in the Gold Coast in his famous 'Sixteen Principles of Education' in 1925 (see McWilliam and Kwamena-Poh, 1975:57). This philosophy hugely influenced educational affairs in Ghana till the Education Act of 1961 was passed.

The next general review of the educational system after Guggisberg occurred in the mid-1930s when the 1937-41 Education Committee was set up to "examine the existing educational system and to make recommendations for its modification."

One of the important recommendations of this committee included the introduction of a two-year Teachers' Certificate B course, in addition to the existing four-year course which led to a Certificate A. This category of teachers formed the backbone of the phenomenal expansion of primary education in the 1950s. They had prospects to receive further training for work in the middle schools.

Another important recommendation of the committee resulted in the establishment of the Central Advisory Committee on Education (CAC) which remained active till 1959. The CAC suggested a large number of useful reforms which the government accepted. It also provided a means by which the government could get to know professional and public opinion regarding educational issues.

Also, the 1937-47 Committees, chaired by District Commissioners, advised on local needs and plans. These committees gave local communities for the first time a voice in the administration of education.

In the 1940s, under Governor Sir Alan Burns, part of the Colonial Development and Welfare Fund was used to finance training of secondary school and training college staff. The fund made it possible for the boys' senior school in Northern Ghana to be duplicated and a girls' senior school built. Furthermore, the fund facilitated the opening of the first training college in the North at Tamale fed by the pupils from the senior school. The first products of the college passed out in 1947 and opened new Local Authority schools whose products went to newly-opened middle schools. Another training college was opened at Pusiga and extensions were made to the Roman Catholic College at Navrongo when the middle schools increased.

The decade immediately following World War II was the most prosperous period ever known in Ghana. During this period, the University College at Legon (now The University of Ghana) was opened on 11 October 1948, affiliated to the University of London. Technical education also received a boost with the opening of the Kumasi College of Technology (now University of Science and Technology) in 1952. And in 1949, the first government-assisted secondary schools in Kumasi - Prempeh College and Opoku Ware Secondary School - were opened; and in 1951, the first secondary school in the Northern Territories was opened at Tamale in the old 'senior school' buildings. Teacher education also received a boost with the number of training colleges rising from 6 in 1940 with 600 students to 19 in 1950 with 1, 800 students.

As independence came within sight, the CPP government passed the Accelerated Development Plan (ADP) in 1951 to hasten the move towards Universal Primary Education (UPE). An Emergency Training College was opened in 1953 to prepare pupil teachers to function more efficiently in elementary schools. By 1957 when independence was attained, there were over 450,000 children in primary schools, taught by about 15,000 teachers.

The ADP empowered the Minister of Education to check discrimination against children by virtue of their religion. But Church Managers and Supervisors continued to manage the existing denominational schools. The managerial roles consisted in the recruitment and payment of teachers and ensuring proper use and availability of school equipment, syllabuses and records.

Also, under the ADP, schools and training colleges receiving government grants were to be put under Boards of Governors which were to appoint the Principals and Headmasters and the rest of the staff, subject to the Minister's approval and exercise control over finance and management.

By 1960, there were, apart from the Kumasi College of Technology, seven technical institutes and the Tarkwa School of Mines. Students in these technical schools pursued a wide variety of courses.

Demand for places in secondary schools increased as a result of the rapid increase in primary education following the implementation of ADP. Accordingly, the government established the Ghana Educational Trust to facilitate the expansion in secondary education. By 1961, there were 68 public secondary schools including 24 built by the Trust. In the same year, fee-free compulsory primary and middle school level education was introduced. Earlier, in December 1960, steps had been taken to attract and retain elementary school teachers: substantial salary increases were awarded and promotion prospects for Certificate A teachers were improved by increasing the number of those to be promoted to the grade of Senior Teacher; and at the same time the new post of Principal Teacher was created to improve the promotion prospects of serving senior teachers (McWilliam and Kwamena-Poh, 1975).

The Education Act of 1961 provided principles within which the Minister of Education could make regulations which had the power of law. The Minister dealt with matters relating to the examination and appointment of teachers, the curriculum, keeping of school records, the admission and promotion of pupils, and the duties of managers (see Education Act of 1961, Section 19).

The Act of 1961 legalised the CPP government's decision to make education compulsory and fee-free. Two years later, the government implemented a free textbooks scheme by which the basic textbooks were supplied free in all primary and middle schools. This latter policy was fraught with distribution problems and

involved huge government expenditure. Consequently, in 1966 the National Liberation Council regime asked parents to contribute to "the cost of supply of textbooks and other school material" (Report of Educational Review Committee, 1967:56).

The Act also empowered the Minister of Education, after consultation with the Minister for local government, to appoint any local, urban or municipal council to be a Local Education Authority (LEA). Such a body was to work through a nine-member education committee and should perform the following functions:

> (a) build, equip and maintain all public primary and middle schools in its area;
> (b) establish all such primary, middle and special schools as are, in the opinion of the Minister, responsible for local government, required in its area;
> (c) advise the Minister on all matters relating to primary and middle school education in its area and such other matters as may be referred to it by the Minister (Section 7 of the Act).

McWilliam and Kwamena-Poh (1975) have noted that the immediate effects of the Act on elementary education were a phenomenal increase in school places and an acute shortage of trained teachers, particularly since the Certificate B course had been stopped in favour of a four-year Certificate A course for middle school leavers. Consequently, the use of pupil teachers increased and there was the need to seek a balance between quantity and quality.

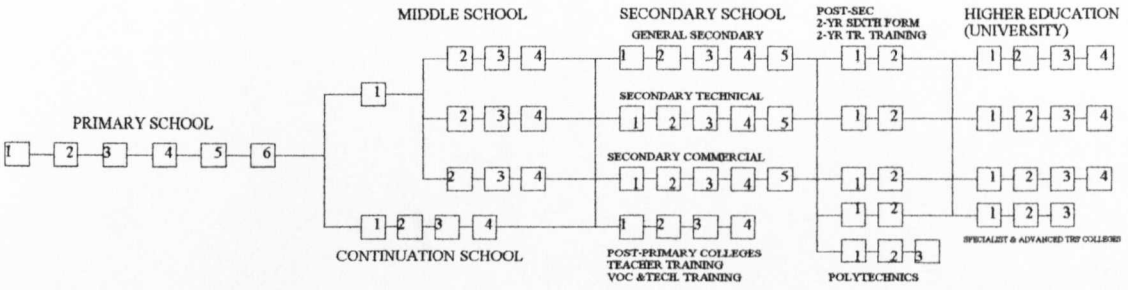
Despite the pressures on public resources to satisfy demand for elementary education, the government still supported tertiary education. By the time of the

overthrow of the CPP government in 1966, three university institutions had been established. The University College at Legon achieved full university status in 1961; the Kumasi College of Technology, founded in 1952, also gained university status in 1961; and the University College of Cape Coast was founded in 1962 (it became a fully-fledged university in 1972).

Perhaps the most ambitious and innovative development in the education sector was the new educational structure which sought to prepare young people to operate within the dual economy. Therefore reforms were initiated in the 1970s to address the problems of relevance and quality (see McWilliam and Kwamena-Poh 1975: 117-33).

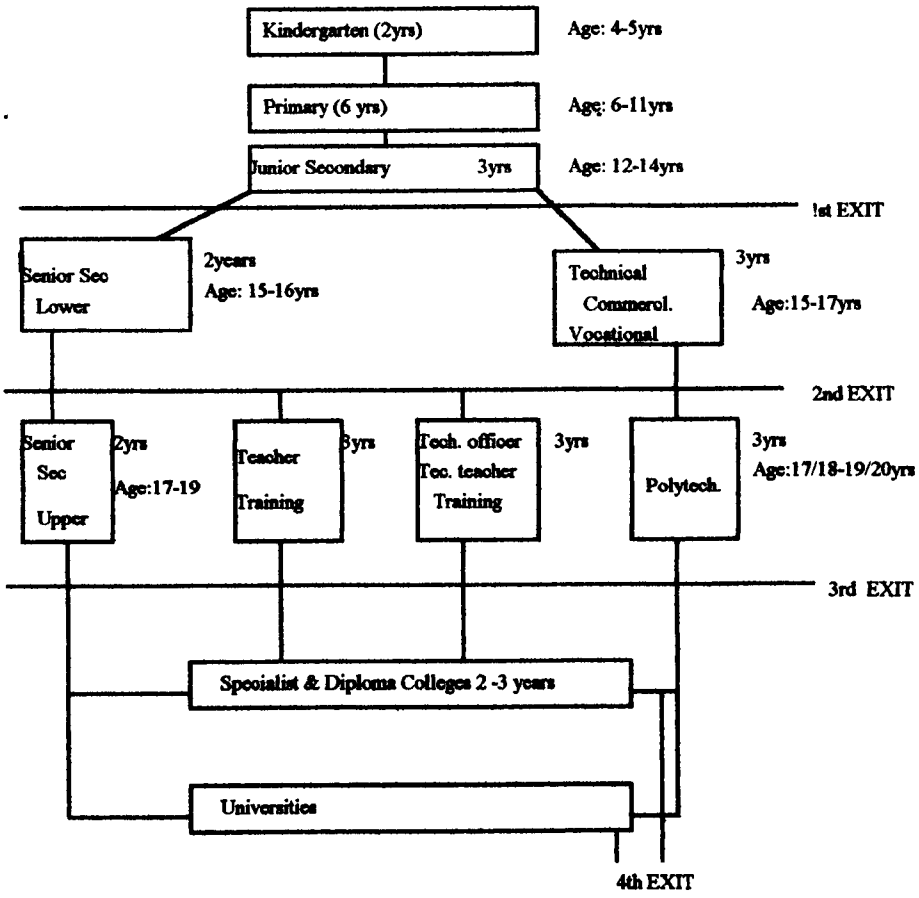
Figures 3.1 and 3.2 show the structures of Ghana's educational system during the periods 1971-74 and September 1975 to August 1987, respectively. Figure 3.1 is a modification of the educational system inherited at independence and is based on the recommendations of the Education Review Committee of 1966-67. Figure 3.2, on the other hand, represents an entirely different structure based on the recommendations of the Dzobo Committee which the NRC appointed to advise on a new structure of pre-university education in Ghana.

FIGURE 3.1: STRUCTURE OF EDUCATION IN GHANA 1971- 1974



Further to improve effectiveness in providing education the NRC established the Ghana Teaching Service -now the Ghana Education Service (GES) - in March 1974. The GES is part of the Public Services and includes all teachers and non-teaching supporting personnel of the Ministry of education and Educational Units. Headed by a Director-General who is the Chief Executive, the GES performs the functions of management, supervision and inspection of pre-university institutions.

FIGURE 3.2: STRUCTURE OF EDUCATION IN GHANA SEPTEMBER 1975 - AUGUST 1987



The NRC introduced the new structure of pre-university education proposed by the Dzobo Committee in September 1975 (Fig. 3.2). The new structure was expected to instil in the individual,

> an appreciation of the need for change directed towards the development of the human and material resources of the country. Equally importantly, it must generate in the individual an awareness of the ability of man, using the power derived from science and improve the quality of life (Ministry of Education, Feb. 1974:1).

An important feature of the new system was that it envisaged a kindergarten education spanning 18 to 24 months for 4 to 6 year olds. Kindergarten education was then to be followed by a 9-year First Cycle education comprising six years primary plus three years junior secondary which were basic, free and compulsory

for those who did not proceed to formal secondary education to pursue academic, technical or commercial courses.

The Junior Secondary School (JSS) curriculum included Ghanaian language, English, mathematics, elementary science, environmental studies, physical education, religious education, cultural activities, music, art and practical activities. Outstanding students from the JSS course entered the first stage of a 2 or 3-year Second Cycle Education and were selected into the following programmes: Senior Secondary Lower courses leading to the existing G.C.E. 'O' level/ School Certificate; Technical courses and Commercial courses leading to existing technical and commercial qualifications.

Capable students could enter the second stage of the Second Cycle Education for further courses - either to Secondary Upper courses leading to the G.C.E. 'A' level or a Teacher Training course leading to the Teachers' Certificate A (Post-secondary) or a Polytechnic course. Those who did not enter the university after the senior secondary upper course had the opportunity to train for middle level professions in Polytechnics or Specialist Teacher Training colleges.

The 1975 structure was never fully implemented. Since September 1975 it had been in its experimental form with an experimental JSS in each regional capital. Thus, the new and the old systems were operated simultaneously. Pupils from the middle schools continued to be selected for formal secondary education through

the Common Entrance Examination and able pupils from the JSS then joined them in Form 4 of the old system [1].

One problem that the new system failed to address was the number of years that a child had to spend in school (a minimum of thirteen years) before sitting for the G.C.E. 'O' level examination. This was a matter that worried the CPP government which sought to reverse the situation by reducing the secondary school course to 4 years, effective from 1963. The CPP government also hoped eventually to let the entry to secondary school be from primary class 6. These plans were reversed after the 1966 coup and were never included in the 1975 structure.

In 1987, another step was taken to reappraise the educational system. This involved modifying the 1975 system with significant changes meant to address the problems of the previous systems. Implementation of this latest reform was begun on in September 1987. It is the hub around which the present work revolves and will be given greater attention in subsequent sections.

3.3 Ghana's Socio-economic Environment and the Role of Education

At independence in March 1957, Ghana's economy was among the strongest in Africa. Twenty-five years later, however, the economy was in a sorry state: real income per head had fallen with concomitant reductions in the production of most food staples and agricultural and mineral exports, too. Government tax base had diminished as a result of dwindling incomes, low productivity and smuggling. The cash strapped economy was burdened with large deficits and an enlarged external

debts, forcing the government to make severe cuts on expenditure on essential services and projects. Thus, the country's infrastructure, including education and health services, suffered severe neglect.

The beginnings of the process of decline of the Ghanaian economy may be traced to the decade 1957-66 when Dr Nkrumah and his CPP embarked on an ambitious process of industrialisation coupled with nationalisation of enterprises and the alignment of the country's trade with Eastern Europe (Synge, 1993). However, the 1970s was the period when economic mismanagement and corruption effectively dealt a devastating blow to the economy. Ghana lost her place as leading exporter of cocoa to neighbouring Cote d' Ivoire during this period, when output of cocoa steadily declined, owing to a combination of factors such as lack of financial incentives for farmers, an overvalued currency (the cedi), unreliable payment procedures and low producer prices, unhealthy cocoa trees, shortage of essential inputs such as fertilisers and pesticides, poor transport and distribution services, drought, bush fires and smuggling.

By 1983, with inflation raging at 122.8 per cent the economy of Ghana had all but collapsed and needed serious attention to repair the damage. Visible signs of economic malaise included falling incomes, lower exports, reduced imports, deteriorating infrastructure, endemic corruption and a serious distortion of incentives. The economy was in deep recession in the productive sector; fiscal and external deficits were unsustainable. Consequently the struggling military

government introduced the first phase of a recovery programme, known as the first Economic Recovery Programme (ERP I), in 1983.

Developed in close collaboration with the World Bank and the IMF, the ERP I sought to stabilise the economy. This phase was followed by ERP II - the structural adjustment and development phase - during the period 1987-90. Then in 1991, the government implemented a two-year adjustment programme.

Green shoots of recovery began to appear by 1992: Ghana's international trade had been stimulated and there was some measure of competitiveness in the country's export base. But the domestic economy was still not responding to the treatment prescribed by the IMF. Also, the level of balance of payments remained in a bad state.

Nonetheless, a commitment to economic liberalisation had been established and, to a large extent, fiscal and monetary discipline, too. Instability in the economy in the late 1980s continued to be "the inadequate performance of the manufacturing sector, which is ill-equipped to compete in either the domestic or foreign markets" (Synge, 1993: 391). But the economy had a chance to experience growth as a result of the policies implemented under the ERP.

The first reform measure was a progressive nominal devaluation of the official cedi between 1983 and early 1986. Then in September 1986, the devaluation

took the form of a weekly foreign exchange auction by which foreign exchange was released for specified transactions (excluding cocoa exports). This auction remained in operation up until 1992. Table 3.1 shows details of the weekly auction rates from the inception of the policy to the end of 1987.

In February 1987, the two-tier structure was unified to eliminate the discrimination against cocoa exports and also correct the unrealistically low cedi exchange rate for specified imports, notably petroleum. Qualitative restrictions on imports were removed and replaced with a uniform rate of customs tariff on most imports was introduced. By the end of 1986 restrictions on nearly all raw materials, spare parts and capital goods had been removed. And by 1987, individuals and firms had been permitted to participate in the weekly auction for the purpose of acquiring foreign exchange to import consumer goods. Then the government licensed a number of foreign exchange bureaux and empowered them to sell foreign exchange independently.

Priority issues on finance centred around the simplification and rationalisation of sales and customs taxes, the improvement of tax administration, and the achievement of prompt adjustment of petroleum and other administered prices.

TABLE 3.1: WEEKLY AUCTION (Cedis per US Dollar)

1986

Month	September		October					November			
Date	19	26	3	10	17	24	31	7	14	21	28
Rate	128	136	145	145	151	147	149	148	149	150	151

1987

Month	December			January				February			
Date	5	12	19	9	16	23	30	6	13	20	27
Rate	152	154	152	150	152	153	154	148	152	150	153

1987

Month	March			April			May			
Date	13	20	27	3	10	24	8	15	22	29
Rate	155	156	156	156	157	158	159	159	160	157

1987

Month	June				July					August			
Date	5	12	19	26	3	10	17	24	31	7	14	21	28
Rate	157	159	159	161	162	163	162	162	162	162	163	164	165

1987

Month	September				October					November			
Date	4	11	18	25	2	9	16	23	30	6	13	20	27
Rate	166	168	171	176	175	174	174	174	174	173	173	174	174

1987

Month	December		
Date	4	11	18
Rate	175	176	176

Source: Ghana Statistical Service

Also, tax brackets and exemptions were amended to reduce the degree of progressivity. Moreover, steps were taken to integrate the ad hoc excise taxes on a

wide range of goods with an expanded sales tax to establish the reformed sales tax as the major source of indirect tax revenues. Furthermore, the import tariff was rationalised as the central instrument of trade protection.

The successive programmes of the IMF under the ERP sought to monitor, limit and change the structure of government spending. Consequently, the number of workers in the civil service and parastatal organisations was whittled down. However, the Programme of Action to Mitigate the Social Cost of Adjustment (PAMSCAD) financed by donors was established to help retrenched workers. PAMSCAD sought to generate jobs for those laid off from the public sector during 1988-90; to strengthen community social programmes including self-help groups; and to provide such basic needs as water, sanitation, health care, nutrition and housing for the most vulnerable groups in society.

The ERP also sought to eliminate an endemic and ridiculous system of price control. Prices were accordingly liberalised to improve access to consumer items, though it widened the gap between the levels of prices and wages. Also, by 1989 subsidies on fertilizer and pesticides had been removed.

Next, 80 out of 235 state enterprises were listed for divestiture while a few were marked for liquidation. Progress in privatisation was slow and by 1992 less than half of the enterprises listed had been sold. But the government was determined not to apply any more funds to state enterprises that did not pull their weight and

so it curtailed access of state owned enterprises (SOES) to budgetary funds and credits. Also, subsidies were removed; investment programmes were rationalised; excess staff were shed to improve management.

Towards the end of 1989, the government agreed to unify, in mid-1990, the auction and forex bureau rate. Furthermore, it agreed to increase privatisation, further relax trade restrictions and liberalise fuel prices. Also, Ghana's first stock exchange, based in Accra, began operations in late 1990, with three stockbroking firms as the first registered clients.

In March 1992, the weekly foreign exchange auction was abolished to allow the exchange rate to be determined by a freely operating inter bank market. Table 3.2 shows the trend of average exchange rates since 1986. The year 1992 also saw the introduction of a new range of tax and import duty rates aimed at curbing inflation which had shot up to 37 per cent in 1990 and had settled at 18 per cent in 1991.

TABLE 3.2: AVERAGE EXCHANGE RATES (Cedis per US Dollars)

Year	1986	1987	1988	1989	1990	1991	1992	1993 (July)
Rate	89.21	162.37	250.00	270.00	326.33	367.83	437.00	647.00

Source: Ghana Statistical Service

The Bank of Ghana tried to reduce the rate of inflation to 8 per cent in 1992 by maintaining positive interest rates ahead of inflation, thus encouraging private

financial savings and forcing the system to indirect monetary control. The BOG also restructured banks in financial distress through the implementation of financial sector reforms in 1992.

Between 1983 and 1984 there was a rise in aggregate output recovery of 8.6 per cent and 6.0 per cent between 1987 and 1988. In 1989, growth rate rose to 6.1 per cent but declined to 2.7 per cent in 1990. However, in 1991, growth again increased to 5.3 per cent only to fall back to 3.9 per cent in 1992. Some of the gains in output have been attributed to the policies of the structural adjustment programme, while others are partly attributable to more favourable weather conditions than the pre-ERP period (Synge, 1993).

With regard to balance of payments, there had been a reversal of the chronic reduction in inputs which had stifled economic growth for several years, and the release of enlarged input volumes for both production and consumption purposes. Overall, however, the current account deficit increased from less than 1 per cent of GDP in 1983 to over 8 per cent in 1990. The balance of payments has continued to deteriorate since 1988, as will be shown in due course.

Gold increased the total value of exports to $1,000M in 1991. But the growth of other exports, especially cocoa, remained low while the volume and value of imports expanded. Debt service ratio was reduced from 28.9 per cent of GDP in 1991 to 25.4 per cent in 1992, made possible by the inflows of official grants and

long-term concessional loans which increased from under 1 per cent in 1983 to about 10 per cent of GDP by 1990, thus facilitating the elimination of general payments arrears and of official reserves.

Also, from 122.8 per cent in 1983, the rate of inflation declined to 10.4 per cent in 1985, but tripled in each of the following five years. In 1991, it fell to 18 per cent. The overall consumer price index was greatly influenced by food prices, fuel prices and developments in the exchange rate of the cedi.

Overall, one can say that the country has improved upon the difficult situation in which it was in the early 1980s. However, the basis of sustained economic growth remained extremely fragile, worsened by the government's indiscretion just before the November 1992 Presidential and Parliamentary elections which all but reversed the clock of progress.

In 1992, government finances appeared to be in good shape. A three-year extended structural facility with the IMF ended in 1991 with a budget surplus of 1.5 per cent of GDP, while inflation had fallen to 10 per cent. The government had also built up foreign exchange reserves covering over four months' worth of imports. However, by the time of the elections in November 1992, the economic indicators had become unfavourable: a projected budget surplus of 1.8 per cent of GDP became a budget deficit of 4.8 per cent, forcing government to borrow from

the banking system, thus pushing the broad money supply to grow by 51 per cent and inflation rose to 13.3 per cent by the end of 1992 (Balls, 1993).

The decline in cocoa prices and, therefore the fall in Ghana's terms of trade, was mainly responsible for the obstruction of economic growth. Agricultural output fell by 0.6 per cent and aggregate growth, consequently, went down to 3.9 per cent in 1991. The fall in terms of trade coupled with a shortfall in foreign transfers meant a net outflow of resources in 1992 (Table 3.3). But the main reason for the rise in inflation and the deteriorating balance of payments deficit appeared to be poor budgetary management. While there was a shortfall in government tax revenues, the government worsened the situation by awarding civil servants an across-the-board salary increase of about 80 per cent. The World Bank reacted to the deteriorating balance of payments deficit by suspending aid flows. Thus, the government was unable to finance its increasing current account deficit. Consequently, it run down its foreign exchange reserves and the cedi exchange rate fell (Table 3.3).

TABLE 3.3 STATUS OF THE ECONOMY OF GHANA BY 1992

	1991	1992
Total GDP ($m)	7001	6884
Annual per cent growth in real GDP	5.3	3.9
At year end:		
Reserves minus gold ($m)	550.2	319.9
3 month treasury bills (%)	20.0	25.4
Debt service ratio (%)*	28.9	25.8
Trade:		
Current account balance ($m)	-251.7	-376.1
Exports ($m)	997.6	986.3
Imports ($m)	1,318.7	1,456.6
Average Exchange Rate (cedis:$)	367.83	437.00

Notes: 1991 out-turn, 1992 IMF estimates. Trading partners share by value in 1991
*Debt service payments as % of GDP. Source: IMF.

The newly elected government which assumed office in January 1993 [2] had the task to get the macro-economy into balance to win the favours of the IMF and its aid donors. Accordingly, the government announced what Balls (1993: 32) referred to as "a frighteningly tough 1993 budget package of tax increases and spending cuts designed to restore order to Ghana's deteriorating public finances after the excesses of the election year." [3]

Table 3.4 indicates the problems of the economy in the 1990s: a projected current account deficit of 3.2 per cent of GDP (-376.1m dollars at the end of 1992; a balance of payments surplus of 1.8 per cent of GDP (-124.3m dollars). However, the government hoped to achieve a balance of payments surplus of 167.5 million dollars (2.6 per cent of GDP) in 1993.

The significant decline in terms of trade is partly due to the fall in the dollar price per ton of cocoa (a fall of 5 per cent compared to 1991) though production volumes also fell from the projected 262,000 tons to 243,000 tons. Thus, while exports grew by 4.6 per cent, their values fell by 1.1 per cent.

TABLE 3.4: GHANA'S BALANCE OF PAYMENTS TREND (US $ m)

	1990	1991	1992	1993*
Exports	896.6	997.6	986.3	1014.6
Imports	1205	1318.7	1456.6	1517.6
Trade balance	-308.2	-321.1	-470.3	-503
Net services	-325.5	-352.5	-376.2	-398.4
Current account	-218	-251.7	-376.1	-374.9
Overall balance**	118	170.8	-124.3	167.5

* IMF projections

** Discrepancy between current and capital account is errors and omissions. Source: Ministry of Finance, IMF.

The poor export performance was aggravated by a surge in imports, as the PNDC government pandered to the whims of the electorate just before the elections.
By the end of 1992, therefore, the country's reserves had fallen to 2.6 months' worth of imports from 4.6 months' worth at the end of 1991. Also, the cedi depreciated from 390 cedis per dollar in the last quarter of 1991 to 520 cedis per dollar in the last quarter of 1992. By the middle of July 1993 the exchange rate had plunged to 650 cedis per dollar.

Overall, it can be said that despite the improvements made upon the economy through the implementation of the ERP, Ghana remains poor. Average per capita income stood at $ 400 in 1992. Professionals continue to flee the country because of low wages, thus worsening the state of some of the public services [4]. The future promises such little hope that the World Bank estimated that at current growth rates, "it would take 20 years for the average poor Ghanaian to cross the poverty line" (Crawford, 1993).

However, Ghanaians appear to be undaunted. An accelerated growth plan was unveiled at a Paris meeting of donors in June 1993, aimed at achieving 8 per cent annual growth rates by the year 2000.

The accelerated growth plan involves an expansion in the category of non-traditional exports to about 29 per cent of total exports throughout the 1990s. Investment and domestic savings ratios were to be substantially improved to

facilitate higher growth rates and agriculture had to be helped to achieve greater productivity. The meeting pledged massive assistance [5].

But the eventual success of the economy depends on the extent to which Ghana can free itself from aid dependence. In this regard, not only must new foreign investors be attracted and exports diversified, but also a new type of Ghanaian worker, entrepreneur and citizen needs to be produced. This requires the intervention of the education system. The next section describes how the education system is being manipulated to achieve economic and social transformation.

3.4 Highlights of the 1987 Educational Reform Programme in Ghana

The Harare Declaration of 1982 incorporated a number of recommendations regarding education and the world of work which African countries consider to be crucial for their development. One such recommendation is that African nations should:

> take steps to strengthen the relationship between education, training and the world of work and include productive in the educational process at all levels..., taking the pupils' ages into account (Rec 6.1, quoted in EDUCAFRICA, 1983, p.22)

The document adds that African educational systems are out of tune with the outside world; that they place unnecessary stress on intellectual instruction to the detriment of technical training and overall personality development; and that those in charge of education have scant understanding of the world of work. Moreover,

the document points out that young Africans, who receive schooling - especially those from the rural areas - get cut off from their home environment which they end up rejecting or even despising. The Harare document further asserts that the education offered young Africans deliberately puts a prestige on Western models; worse still, such models are quite often obsolete on account of progress made in the Western societies themselves. In particular, it is pointed out that secondary education offered often assumes an aspiration toward higher education and the fate of dropouts is not taken into account.

Therefore, the Harare document defined a new option of educational provision aimed at promoting development on the principle of a hard-won sovereignty. The new option also seeks to democratise the provision of education, promote the values cherished by the society and speed up change and modernity. In practical terms, the approach involves paying greater attention to the skills needed for survival in the working world within the educational training system. This means that African nations must endeavour to facilitate a more dynamic interaction between theory and practice.

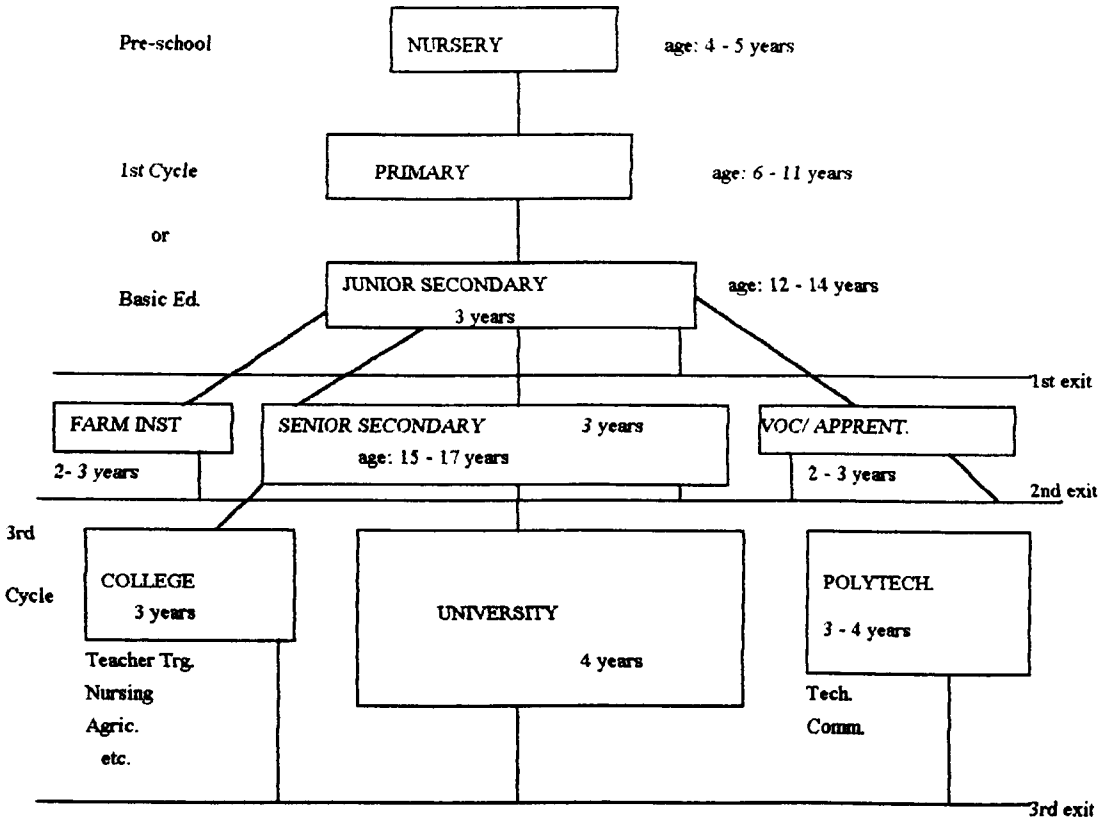
Accordingly, Ghana has begun implementing a new structure and content of education in 1987. The government modified the system proposed in 1974 and adopted in 1976 and began implementing the new system on a nation-wide basis without much ado, ostensibly to prevent the reform programme being wrecked by

parties antagonistic to it. The government hoped to implement the programme first and then deal with the problems that follow the implementation later.

Figure 3.3 shows the structure of Ghana's present educational system. It is a 6-3-3-4 system, providing for nine years of basic education. Attendance at primary and junior secondary school (JSS) is 'free and compulsory' and may be terminal at the JSS stage. However, outstanding JSS graduates may proceed to pursue three-year programmes in general arts and science, technical, commercial or agricultural senior secondary schools (SSS). Although tuition remains free in government-assisted SSS, parents still bear a high cost of charges in respect of text books, boarding and messing. Selection of JSS students for admission to SSS is on the basis of the results of the Basic Education Certificate (BECE). But the transition from primary to junior secondary school is not governed by any selection examination; it is automatic.

Students from SSS who pass the senior secondary school leaving examination may proceed to university upon passing the university entrance examination. Other successful candidates may enter a polytechnic or a college to train as teachers, nurses, social workers, or technical officers in agriculture, forestry, animal science, public health, etc. Those who enter the polytechnics train for middle level positions in industry and business.

FIGURE 3.3: NEW EDUCATIONAL SYSTEM OF GHANA (SEPT. 1987)



It is expected that JSS students who do not continue to SSS will undergo apprenticeship under master craftsmen or in farm institutes and vocational schools to equip them with skills to contribute towards the improvement of themselves and their communities.

All post-SSS institutions are tertiary level institutions. Under the reform programme, university education has been rationalised with a view to improving efficiency through the optimal utilisation of both material and human resources. Enrolments in the universities are expected to go up and two new universities - the University of Development Studies in Tamale and the University College of Winneba - have been added to the three existing universities to absorb the

increased number of eligible students expected as a result of the expansion in secondary education.

Non-degree awarding tertiary institutions will eventually be reorganised into regional colleges of applied arts, science and technology (RECAAST) to eliminate waste resulting from under-utilisation of material and human resources or duplication.

Enrolment in primary school stagnated since the 1970s and a smaller proportion of the age cohort were reaching grade 4. Also, 57 per cent of females are illiterate, showing that a lot remains to be done to ensure equity in educational provision, not only with regard to gender, but also with regard to geographical location (see World Bank, 1990).

World Bank (1990) figures further indicate a smaller proportion of tertiary level students in science and engineering than was the case 30 years ago. Coupled with this, had been a serious brain drain among professionals which is illustrated by such indicators as the population per physician and population per nurse ratios.

Furthermore, dropout rates were increasing. Young people saw no point in remaining in school only to be unemployed after they have completed their courses. Indeed, by the 1980s it had become relatively more lucrative to sell dog

chains and second-hand clothes than to undergo schooling that promised no future.

It was against this background that the educational reform programme was implemented to provide better access to at least nine years of basic schooling, with some appropriate skills, and help the youth develop attitudes that would make them want to remain to serve the community and gain confidence to pursue self-employment where the state cannot offer them jobs in the public sector.

The reform programme has, therefore, involved curricular and administrative innovations. Its hub is the Junior Secondary School where curricular reforms have been going on since 1987. The JSS curriculum has been given a vocational orientation. Table 3.5 shows the subjects JSS students study. Students are expected to take all these subjects where facilities exist.

TABLE 3.5: SUBJECTS STUDIED IN GHANAIAN JUNIOR SECONDARY SCHOOLS

English Language	Mathematics	Technical Studies
Ghanaian Language	Life Skills	Technical Drawing
French	Social Studies	Physical Education
Science	Cultural Studies	
Agric. Science	Vocational Studies	

Students who proceed to SSS from the JSS are streamed into schools which offer general arts, science, technical/ vocational, commercial, and agricultural courses. The cluster of subjects for each course category is indicated in Table 3.6

Also, the administration of education has been reorganised in order to improve supervision in first and second cycle institutions. All education districts are now headed by Directors of Education rather than Assistant Directors. And unlike in the past when the Assistant Directors had no supervisory powers over secondary schools in his education district, the new system gives the District Directors of Education power over all first and second cycle schools in the education districts. Thus, supervision in senior secondary schools has been decentralised so that it is the prerogative of the District Director to oversee all pre-university institutions in his district and report to the Regional Director of Education.

By 1990, reports in the Ghanaian press were already alluding to a myriad of problems associated with the implementation of the educational reform programme. Between 1990 and 1992, over 280,000 JSS leavers could not proceed to second cycle institutions (see ***The Independent,*** Feb. 4-11, 1993:1). Also, the Conference of Heads of Assisted Secondary Schools (CHASS) had felt that the duration of the SSS course was too short and pleaded with the government to extend the course from three to four years. The Ghana Education Service was reported to have turned down the request and appealed to parents to "voluntarily provide motivation" for the teachers to do extra teaching in order to cover the syllabuses. Besides, many schools were alleged to be without essential textbooks (***Daily Graphic,*** Feb. 17, 1993: 1).

TABLE 3.6 SUBJECTS STUDIED IN GHANAIAN SENIOR SECONDARY SCHOOLS BY CATEGORY

	General Arts and Science	Business and Commercial	Technical, Vocational & Agricultural
	English Language	English Language	English Language
Core Subjects	Mathematics	Mathematics	Mathematics
	General Science	General Science	General Science
	Life skills	Life skills	Life Skills
	P.E	P. E.	P.E.
	Agric. Sc. & Environmental Stds	Agric Sc. & Environmental Stds	Agric & Env. Stds
	Ghanaian Language	Ghanaian Language	Ghanaian Language
	Literature in English	Typewriting	Metalwork
	French	Shorthand	Woodwork
	History	Accounting	Horticulture
	Religious Studies	Economics	Agric Extension & Econs
	Ghanaian Languages	French	Home Econs - this includes:
	Government	Clerical & Office Duties	a) Management in Living
Electives*	Music	Business Management	b) Textiles
	Art		c) Foods & Nutrition
	Biology		Art
	Chemistry		Engineering Sc. & Tech Drawing
	Physics		Applied Electricity & Electronics
	Mathematics		Building Const.
	Geography		
	Economics		

* Students choose three elective subjects. The core subjects are compulsory.

The extent to which these problems affected the prospects of the educational reform programme was not known. The present study sought to provide some information about the state of the educational reform programme and its potential for national development. The methodology adopted for the enquiry is described in the next Chapter.

3.5 Summary

This chapter has described Ghana's political, economic and educational experiences in both historical and contemporary contexts. The circumstances that led to the implementation of the 1987 educational reform programme have been

explained and a setting has been provided for the report of a study of the educational reform programme .

Notes

[1] Actually, many headmasters were unwilling to admit the experimental JSS graduates to Form 4 because of their low standard. They were usually put in Form 3.

[2] The government was really not new. The Cabinet was largely the same as under the PNDC.

[3] For example, the price of premium petrol rose from ¢1,000 to ¢1,600 a gallon (i.e. $2.50 at current exchange rate). Government expected to obtain the rest of its revenue from cocoa exports, taxes and sale of state enterprises.

[4] By 1992, the population per physician ratio was 15,000:1, worse than in 1975.

[5] The Paris Conference overwhelmingly endorsed the plan and pledged a further 2.1 billion dollars, nearly 0.5 billion dollars more than asked for, over two years.

CHAPTER 4

A STUDY OF GHANA'S 1987 EDUCATIONAL REFORM PROGRAMME

4.1 Overview

Implementation of the 6-3-3-4 system of education adopted by Ghana was begun in 1987 with the nationwide conversion of all existing middle schools into junior secondary schools. The curriculum for these schools differed from that of the middle schools in terms of both academic and pre-vocational and pre-technical content. The document which spelt out the nature of the reforms explained the rationale of the educational reform programme as follows:

> The need for the reform was based on the recognition that any system of education should aim at serving the needs of the individual, the society in which he lives and the country as a whole (Ministry of Education and Culture, 1987:1)

This Chapter describes a study of the educational reform programme with particular reference to its implementation at the school level in four districts of the Brong-Ahafo Region. The study investigated the extent to which the education being provided is relevant to the needs of the educand, the local community and the country. Therefore the focus is on the implementation of the reform programme and the transaction of the new curriculum in the schools. The study also investigated the prospects and potential of the reform as perceived by stakeholders.

4.2 The Research Questions

Considering the problems of educational reforms identified by Thompson (1981), Sinclair (1977, 1980) and Psacharopoulus (1990), the central problem of the present study may be expressed by the question:

> *What is the evidence that Ghana 's current educational reform programme has prospects of success and a potential to contribute to the development of the country?*

The question is pertinent because previous educational programmes in Ghana had failed for reasons which have not been empirically established [1]. However, as happened in many developing countries, the failure could be associated with either the school situation or policy directives, or societal conflicts (see, for e.g., Psacharopoulus, 1990; Thompson, 1981). Taking these factors into consideration, the above question may be reframed in the form:

> *How far does the educational reform programme in Ghana correspond to the country's development goals, and to what extent do curriculum intentions and implementation realities match?*

This question can further be broken into the specific questions posed in Chapter 1, which are repeated below for ease of reference:

1. What roles were assigned to educational development and curriculum development to reflect the development goals of Ghana?
2. What strategy of curriculum development was used?
3. What factors influenced various stakeholders during the innovation process which culminated in the present structure and content of education in Ghana?

4. How are the new curricula transacted in the junior secondary schools (JSS) and senior secondary schools (SSS)?
5. What factors can be identified for any mismatch between curriculum intentions held by the curriculum innovators and the actual implementation of the JSS and the SSS programmes?
6. What pre-vocational and pre-technical skills are actually learnt by the third of JSS and the third year of SSS?
7. What are the perceptions of parents, teachers, administrators and students regarding the viability of the new education?
8. What subjects are popular among final year senior secondary school students?
9. What are the attitudes of JSS and SSS students regarding occupational choices and preferences; self-employment; living and working in rural areas; the possession of certificates; the pursuit of higher education? Do the opinions of students following the old system differ from those under the new system?
10. What has happened to those who terminated their education at the JSS level?
11. What positive effects has the introduction of the educational reform programme had on access to primary education?
12. In what ways are schools' activities being integrated with the activities of the communities in which the schools are situated?

4.3. The Research Approach

The nature of these questions demands a pragmatic approach. Therefore in seeking answers to the questions, descriptive and analytic approaches were used together in order to focus on:

(a). the changes in educational and curriculum goals since the mid-1980s to reflect national development goals;
(b). the innovations of the educational reform programme;
(c). the intrinsic features of core and vocational curricula of the educational reform programme;
(d). the implementation monitoring, assessment and evaluation systems;
(e). the barriers to implementation; and

(f). stakeholders' perception of the educational reform programme.

Examination and analysis of documents facilitated the reconciliation of policy directives and actual practice. A sample survey and multi-site case studies enabled the events and outcomes of the reform programme to be described. The data gathering techniques involved the use of interviews, questionnaires, and non-participant observation.

School-based investigations followed Parlett and Hamilton's (1976) illuminative evaluation model, after school environments and antecedents had been observed. Illuminative evaluation is aimed at describing and interpreting rather than measuring and predicting [2].

A fundamental limitation of the illuminative approach is the subjectivity imposed by its interpretive nature. As Burell and Morgan (1979) have pointed out, the interpretive paradigm of analysis is influenced by a concern to understand the fundamental nature of the world at the level of subjective experience. Under this analytical paradigm, explanation is sought within the framework of the participants as opposed to the observer of the action.

The major weaknesses of illuminative evaluation are, therefore, the predominance of subjectivity and assumed potential research bias. Aware of these shortcomings, some researchers who have used the approach took precautions to rationalise the process by introducing what they considered to be "objective" elements in their

strategies to neutralise the inherent subjectivity (Boud *et al*, 1985; Ibrahim, 1991). Some of such measures include the separate preparation of field notes on observations, interviews and perceptions so they can be cross-checked, and the introduction of quantitative data (where appropriate) to "validate" impressions and observations, though masses of quantitative data are not necessarily a hallmark of objectivity. In any case, as Adamu (1991) has observed:

> ...subjectivity does not imply lack of empirically verifiable evidence. Subjective insights often capture the essence of different people speaking with different views. Moreover, some projects can be more effectively analysed from a subjective perspective rather than from a standpoint which distances the researcher from the mechanism of the process (Adamu, 1991: 65).

Despite these limitations, the illuminative approach can incorporate a wide range of techniques, which provide a powerful tool in conducting any enquiry with significant emphasis on social dimensions. This is why the present multi-site case study involved the use of the illuminative approach.

The operations of the JSS and SSS curricula in the classrooms were examined using Taba's (1962) objective model. The analysis of the curriculum materials was based on the Sussex model (Eraut *et al*, 1975) while the strategy for classroom observation was adapted from Walker and Adelman (1975) and Delamont (1976).

4.4 Sequence of Research Activities

The foundations for the study and the actual execution and documentation of field research were organised as follows:

Phase 1 involved a review of literature on education and development; the evaluation of educational innovations; and a synthesis of educational reform efforts in Brazil, Chile, China, Cuba, India, Malaysia, Nigeria, Papua New Guinea, Tanzania, Zimbabwe, and Zambia. Also, the experiences of Japan and Sweden were studied as industrialised countries which may serve as examples successful educational reformers. Published works in libraries and electronic journals were the main source materials. During this period also, publications on educational , economic and social development were reviewed. This phase was undertaken in the University of Hull.

Phase 2 involved a study of the 1987 educational reform programme. This involved fieldwork in Ghana. The purpose of this aspect of the study was to focus upon and analyse the perceptions of stakeholders regarding the educational system in terms of its structure and content and how the reform was being implemented at the school level. The study sought ultimately to assess the prospects of the educational reform and its potential for national development.

Phase 3 of the study followed the completion of fieldwork. It involved the editing, re-coding organisation and the preliminary analysis of field data at the University of Cape Coast, Ghana.

Phase 4 was undertaken at the University of Hull. It involved the final analysis of data and the final write-up of the research findings.

4.5 Instruments and Strategies

Analytical and descriptive approaches were used to elicit both qualitative and quantitative data, with case study and survey methods being used in conjunction. The data gathering strategies included questionnaires, interviews, controlled observation (perusal of official documents, pupils records, etc.), and non-participant observation in natural settings. The following research instruments were used.

4.5.1 Questionnaires

Four types of questionnaires were used: teacher questionnaire; JSS student questionnaire; SSS student questionnaire; and Sixth Form (SF) student questionnaire. Many of the items of the student questionnaires used were previously by Foster (1965a) to study secondary education in Ghana. They were used in the present study because the responses they elicited at the time are still pertinent and fit the questions of the present study. While some of the items were used in the form Foster constructed them, others were adapted in terms of wording and content to reflect the experiences of the present generation of Ghanaian secondary school students. The various questionnaires were pre-tested in a pilot study, details of which appear in section 4.8.

4.5.1.1 Teacher Questionnaire

Teacher questionnaire contained questions and attitude statements to elicit information about the transaction of the new curriculum materials in the schools, the teachers' perceptions of the nature, course and outcomes of the educational reform programme as well as the overall prospects and problems of the programme (Appendix A).

4.5.1.2 JSS Student Questionnaire

JSS student questionnaire contained questions and attitude statements to elicit information about what junior secondary students' expect from and how they perceive the educational reform programme. Also included were questions and attitude statements aimed at eliciting information about the students' attitude towards the academic and vocational aspects of the curriculum, their aspiration to senior secondary and higher education, their occupational choices and preferences and how they feel about living and working in rural areas (Appendix B).

4.5.1.3 SSS Student Questionnaire

SSS student questionnaire consisted of questions and attitude statements to elicit information about senior secondary school students' expectations and how these are related to the courses provided under the educational reform programme. There were questions which probed the students' attitudes towards the acquisition of vocational skills and their aspirations towards tertiary education. Also included

were questions regarding their attitudes towards rural and urban life (Appendix C).

4.5.1.4 SF Student Questionnaire

Sixth Form student questionnaire was a slightly modified version of SSS student questionnaire. Sixth Form students were given the opportunity to compare the system they have passed through with the present system emerging from the reforms (Appendix C*).

4.5.2 Interview Schedule

In the case of teachers and students, interviews were based on the questionnaires completed and returned. Teacher and student interviews were therefore meant to complement the questionnaire data, thus affording the researcher the opportunity to check on the reliability of questionnaire data on a general basis. However, the interview data were also supplementary because some of the interviewees did not fill in questionnaires. The circumstances leading to this are discussed in the pilot study report.

Interviewing of other stakeholders initially involved open-ended questions regarding the conceptualisation, initiation, planning and implementation, problems and prospects of the educational reform programme. The interview schedule for this purpose was semi-structured and was sufficiently flexible to

facilitate further exploration and probing during the course of the interview (Appendix D). The schedule was modified wherever necessary as the research progressed and new insights were gained.

4.6 Research Design and Selection of Research Sites and Subjects

During the initial stages of the planning of the present study, the researcher considered conducting the research in a random sample of six out of the ten regions of Ghana. From each of these regions, two districts were to be randomly selected. Then in each of these districts two junior secondary schools and two senior secondary schools in urban areas, and another pair of junior and senior secondary schools in rural areas were to be included in the study.

However, time and financial considerations culminated in curiosity being mediated by expediency (cf. Lewin, 1990:59). Therefore the educational reform programme was considered as a bounded system (case) to be studied (see Adelman *et al*, 1983; Merriam,1988:46). Then within this case, the focus was on a unit of analysis comprising a number of case studies. In particular, the implementation of the educational reform programme at the school level was taken for the unit of analysis. Then actors were interviewed, questionnaire administered, observations carried out and documents analysed. All of these activities were restricted to four districts in one region - the Brong-Ahafo Region.

The selection of the research region was based on the principles of purposive (Chien, 1981) or purposeful (Patton, 1980) or criterion-based sampling (Goetz and Lecompte, 1984). The reason for this was that the researcher wanted to "discover, understand, gain insight; therefore (he needed) to select a sample from which (he could) learn the most" Merriam, 1988: 48). The criteria that guided the choice were typicality and degree of variation of educational provision in relation to other regions of the country among the educational districts in the region. The Brong-Ahafo Region satisfied these criteria: it is typical of the regions with modest levels of educational provision, with some features of the deprived North in some aspects as well as features of the affluent South in other aspects. For example, the Brong-Ahafo Region has 10.4 public primary schools per 10, 000 of its population, compared with a national average of 9 primary schools per 10, 000 persons. At the JSS level, the Brong-Ahafo Region has 4.8 schools per 10, 000 persons as against a national average of 4.1; and equals the national average of 3 schools for 10, 000 persons at the SSS level (ratios derived from data in Ghana Statistical Service, 1993, pp. 91, 93). But the region has the largest proportion of untrained teachers.

Having decided on the region, the four school districts selected were determined on the proviso that:

(i). at least one district compared favourably with the leading districts in terms of educational provision and output;
(ii). the four districts were contiguous and movement among and within them would not be severely hampered;
(iii). the researcher was familiar with the terrain of the districts.

The above conditions were imposed in order to forestall settling in problems. Given the time constraint, it was necessary to minimise the time required to get immersed in the field and also the time spent moving among schools so that optimal use could be made of the time available for actual research activities.

The districts that met the stated criteria were the Sunyani, Tano, Asutifi and Asunafo Districts.

The choice of schools for the study was done using both probability and nonprobability sampling procedures. But each sampling procedure was influenced by the pilot study which will be described presently.

4.7 Fieldwork Plan

A blueprint of the fieldwork is outlined in a matrix of activities shown in Table 4.1.

TABLE 4.1 MATRIX OF FIELDWORK ACTIVITIES

PURPOSE	SOURCES	METHOD
1. To gather information about the initiation, development, the conceptualisation and the implementation of the educational reform programme.	Official documents; Personnel of the Ghana Education Service Heads of schools and teachers.	Documentary analysis, interview
2. To obtain information about curriculum intentions, the preparation of curriculum materials and their suitability.	Documents; syllabuses; teachers and Heads of schools.	Documentary analysis; curriculum analysis; interviews; and questionnaire survey.
3. To study the mode of transaction of the curriculum materials.	Heads of schools and teachers; students, classrooms; workshops farms and laboratories.	Observation and interviews
4. To find out the nature of assessment procedures and the influence of external examinations.	Documents; examination papers; students; teachers and Heads of schools.	Documentary analysis; past questions analysis; interviews; questionnaire survey; observation in classrooms, laboratories; farms and workshops.
5. To find how stakeholders perceive the innovations under the education reform..	Parents; teachers and heads of schools; officers of the Ghana Education Service; other opinion leaders.	Interviews; questionnaire survey and analysis of media reports.

4.8 Pilot Study

There were five instruments for the study and each of them was tried out in the manner described below.

4.8.1 Try-out of Stakeholders' Interview Schedule (Appendix D)

The interview schedule for stakeholders was tried out on the researcher's neighbours and work colleagues in Cape Coast. The interviewees included parents, teachers and education officials. The purpose of the try-out was to determine the clarity of the questions and find out the interviewees' reactions to the style of questioning and the content of the questions, too. The general framework of the schedule was satisfactory and was retained but in the actual fieldwork modifications had to be made as insights were gained as the research progressed.

4.8.2 Try-out of Teacher Questionnaire (Appendix A)

The researcher arrived at the University of Cape Coast when there was a large number of teachers on the campus; some were attending vacation courses while others were attending a series of interviews for selection to various courses. Forty-five of these teachers were randomly selected and requested to complete the teacher questionnaire. The purpose was three-fold: first, to determine the clarity of the questions; secondly, to find out the extent to which each item elicited the responses that the researcher wanted (i.e. to test the internal validity of the

questionnaire); and thirdly, to determine the approximate time required to fill in and return the questionnaire.

Forty of the questionnaires were returned and an analysis of the items indicated that the questions were clear and each item elicited appropriate responses in 39 of the 40 cases. The 'dissenting' respondent was kind enough to make comments regarding his inability to respond or his source of confusion. These comments were discussed with colleagues of the University of Cape Coast and some of the respondents and the general impression was that the items that elicited no appropriate responses from the single respondent need not be dropped or changed. So the teacher questionnaire was retained (see Appendix A).

However, the pilot study revealed that it would be extremely difficult to get some teachers to work on the questionnaire promptly. In fact five of the forty-five teachers had failed to fill in the questionnaire, while it took almost three weeks to retrieve the completed questionnaire from those who filled them in - after several reminders. Informal conversations with some of the respondents did not suggest that the questionnaire was too long. Rather it appeared that teachers were becoming hostile to any paper work connected with the educational reform programme. One teacher bluntly told the researcher that "teachers are justifiably fed up with paper work." This was a welcome warning shot and the researcher had to reconsider his sampling procedure as well as his mode of administration of the questionnaire if useful information from teachers about the educational reform

programme was to be obtained. Details of the sampling procedures given in Section 4.9.2 show how the researcher made use of this insight gained.

4.8.3 Try-out of Student Questionnaires (Appendices B, C, C)*

There were three types of student questionnaires to be pre-tested. They included:

(i). JSS Student Questionnaire (JSSSQ);
(ii). SSS Student Questionnaire (SSSSQ);
(iii). Sixth Form Student Questionnaire (SFSQ).

All of these questionnaires were written in English because the characteristics of Ghanaian secondary school students make the use of any vernacular not expedient. This stems from the fact that Ghanaian students in secondary schools come from different regions and speak different languages so that a use of any vernacular in preparing a research instrument would eliminate many students from participating in the research. Therefore any questionnaire used to study Ghanaian secondary school students must be in English, though the students' command of the language is low. Foster faced this problem when he studied Ghana's secondary schools, and settled the matter by using simple English forms and choosing his respondents from fifth forms only (see Foster, 1965: 311). But unlike the Foster study, the present study does not favour the exclusion of students from the junior forms. Thus the pilot study was crucial in determining what needed to be done to elicit as much valid and reliable information as possible from all sections of the secondary school students in the schools sampled.

Accordingly, the purposes of the pre-test were:

(i). to determine the suitability of the questions in terms of language difficulty;

(ii). to determine the extent to which respondents would provide clear, appropriate answers to the questionnaires, especially where open-ended questions and attitude statements were involved (internal validity);

(iii). to determine, where necessary, what limits to impose on sample size without sacrificing representativeness.

4.8.3.1 Try-out of SFSQ (Appendix C)*

The pre-test of the SFSQ was done using upper sixth form students of the University Practice Secondary School. Seven students completed the questionnaire. Their responses were relevant and clear. So no revision was deemed necessary since there was no reason to believe that the respondents were academically superior to the sixth form students in the actual research schools.

4.8.3.2 Try-out of SSSSQ (Appendix C)

The SSSSQ were pre-tested on 60 students drawn from all three year groups of a senior secondary school in the Tano District on 11 October 1994 while the researcher was doing exploratory studies and supervising teaching practice there.

The completed questionnaires were edited and divided into two groups: usable and unusable. A returned questionnaire was considered unusable if the respondent failed to comply with the instructions -e.g., where the respondent selected more

than the number of alternative responses required to properly answer the question, or where the respondent failed to answer two or more open-ended questions. Such cases were taken to mean that the respondent probably filled in the other parts of the questionnaire without much thought and the responses were therefore considered to be unreliable. Table 4.2 shows the distribution of usable and unusable responses among the three classes of students.

TABLE 4.2 DISTRIBUTION OF USABLE AND UNUSABLE RESPONSES

FORM	No. USABLE	No. UNUSABLE	TOTAL
1	18	2	20
2	12	8	20
3	8	12	20
TOTAL	38	22	60

χ^2 = 7.978 DF = 2 Significant at 0.05 level.

The total number of usable and unusable responses falling into three categories, Forms 1, Form 2 and Form 3 are given in Table 4.2. The proportion of usable responses returned by Forms 1, 2 and 3 are 90 per cent, 60 per cent and 40 per cent respectively. This association between the students' Form and usable responses can be shown to be significant at the 0.05 level by a chi square test, chi square being 7.978 with 2 degrees of freedom.

Therefore the researcher concluded that non-chance differences in the proportions of usable and unusable questionnaires associated with different year groups were to be expected.

With the help of English language teachers, the researcher carefully went through the answers provided to every item on the questionnaire and was satisfied that no further revision was likely to improve the proportions of usable questionnaires returned by students involved in the trial. As Table 4.2 shows, restricting the sample to only the senior forms (i.e. form 3 of the current system) was also not expedient since even the first years appeared better prepared to handle the questionnaires. These revelations were taken into account when the final sample for the questionnaire survey was selected. The procedure is described in section 4.9.

4.8.3.3 Try-out of JSSSQ (Appendix B)

A try-out of JSSSQ was undertaken using first form students of the University of Cape Coast Junior Secondary School. The questionnaires were administered to a random sample 40 students. Twenty-five of these students had attended the University Primary School. This group simulated urban school students in the research area. The others had come from primary schools in other schools in Cape Coast, including the villages near the university. These were used as proxy for rural JSS students in the research area. The reason for the proxies was that *a priori* considerations suggested that first form students who passed through the

University Primary School generally had a comparable or better command of English than most second and third form students in the research area. Thus, if alumni of the University Primary school had problems with the questionnaires, then most students in the research area would most likely have similar problems. Similarly, problems of students who came to the University JSS from other primary schools would be indicative of the type of problems to expect from the rural JSS and some urban JSS students in the research area.

The completed questionnaires returned were scrutinised item by item and the number of items that were fully answered were noted. Table 4.3 describes the try-out data in terms of the number of errors detected in each fully answered questionnaire.

TABLE 4.3 JSSSQ TRY-OUT DATA SHOWING DISTRIBUTION OF ERRORS

PROXY	# students	Median	Mean	SD	Mean Rank
Urban	25	1	1.80	1.71	14.20
Rural	15	6	4.80	2.65	31.00

$Z_{x,r} = 4.4218$ significant at 0.01 level.

The number of wrongly completed items by each subject was determined. Table 4.3 gives the median, mean and standard deviation for the 'urban' groups (students who attended the University of Cape Coast Primary School) and the 'rural' (students who attended other Primary schools). The median error score is higher for the rural group suggesting that their primary school background may have had an adverse effect. Raw data scores were transformed into ranks in order to

perform a Mann-Whitney U test for H_0: $M_U = M_R$. H_1: $M_U < M_R$ The mean ranks differ in the same direction (Table 4.3) and the effect was found to be significant at the 0.01 level ($z = 4.4218$, $p < .0049$). The data did not support the null hypothesis and it was concluded that non-chance differences in the errors arising from the filling in of the questionnaires would be less in the urban schools than in the rural schools.

Because of this finding, the performance of the 'rural' and 'urban' schools students on the questionnaire items that were incorrectly answered or not answered at all were perused. In the case of items that involved open-ended questions, wherever it was apparent, from two or more responses that the students had intended to convey an opinion or fact but could not express it because of language difficulty, the relevant open-ended question was recast into a structured one, requiring the respondent to select a response from a number of alternatives including what the students had tried to express but failed. These modifications were discussed with school teachers and the final instrument used was as reproduced in Appendix B.

4.9 Final Sampling Decisions and Procedures

The selection of a sample for the school-based aspect of the study was partially influenced by the results of the pilot study. Differences in the capacity of the students to properly and clearly fill in the questionnaires suggested that it was better to keep down the number of questionnaires so as to facilitate closer supervision of the data gathering process and thus improve the accuracy of the

data. In this regard, the sample size was considered less important than sample representativeness.

The research region had over 56 senior secondary schools, 20 of which were in the four research districts. There were also over 100 junior secondary schools in the research districts.

It would have been impossible to visit all these schools in the time available. Besides, the physical state of the roads rendered many of the schools almost inaccessible, particularly in the Asunafo district. Nevertheless, it was desirable to have a wide range typical of the schools in these districts.

4.9.1 The SSS Sample

Consequently, the researcher decided to take a 50 per cent sample of the SSS in the research districts. This sample was drawn by assigning numbers to a list of the schools and then selecting cards bearing these numbers from a box after mixing up the contents of the box. The selection was done with replacement to ensure that at least 4 schools outside the district capitals were included. Table 4.4 shows the location of the schools selected.

TABLE 4.4 COMPOSITION OF SSS SAMPLE

Place\ District.	SUNYANI	TANO	ASUNAFO	ASUTIFI	# Schools
In district. capital	3	1	1	1	6
Outside capital.	0	1	0	3	4
#Schools	3	2	1	4	10

The schools within the district capitals were over-represented in the Sunyani District while those outside the district capitals were over-represented in the Asutifi District, and not represented at all in the Sunyani and Asunafo Districts. However, the Sunyani schools included one non-assisted school whose status was comparable to schools outside the district capitals. Also, in the Asutifi District, among the schools outside the district capital was one school that, in fact, could have changed places with the school in the district capital; it was both older and larger and had facilities comparable to any of the district capital schools. Worthy of mention, too, is the fact that the poor state of the roads in the Asunafo district made travelling within that district not only expensive in terms of time but also extremely hazardous. So the researcher had to abandon the idea of dropping one 'rural' school in the Asutifi District in favour of a 'rural' school in the Asunafo District. Given these circumstances, the locational dispersion of the schools included in the SSS sample was considered reasonable.

However a second level of sampling was still needed. This arose directly from the insights gained from the pilot study. There was the need to keep down the number of questionnaires as in order to facilitate supervision to improve internal validity

and reliability. At the same time there was the need to include schools to reflect the full range of programmes offered under the educational reform programme. So, the ten sampled schools were grouped according to their programme offerings and a sub-sample of six was drawn by selecting cards bearing the numbers assigned to the schools from a box, with replacement until schools representing the various programme categories were included. Table 4.5 shows the distribution of schools.

Only students in the schools included in the sub-sample were required to fill in questionnaire. However, all of the ten schools in the main sample were targetted for visits and observations and the teachers and students in them were all potential interviewees.

TABLE 4.5 DISTRIBUTION OF SCHOOLS BY PROGRAMME OFFERINGS

SCHOOL TYPE	PROGRAMMES OFFERED	# SCHS IN SUB-SAMPLE	# SCHS IN SAMPLE
A	Agricultural Science and Vocational skills only	1	1
B	Science and Arts, Vocational skills, Visual Arts and Business studies	1	2
C	Science and Arts, Vocational skills, and Technical skills	1	1
D	Arts and Business only	0	1
E	Arts, Business, Vocational skills, Visual Arts	1	1
F	Science, Arts, Vocational skills Visual Arts and Agricultural Science	1	2
G	Science, Arts and Vocational	1	2
	Total	6	10

4.9.2 The JSS Sample

Although it might have been desirable to randomly select the sample of JSS from the total number of schools in each of the four districts this procedure was not

feasible. The locations of some JSS were so remote and the road network in two of the districts was in such a bad state that it would have meant spending considerable time trying to reach some of the schools so selected. So the researcher concentrated on schools that could be reached with less difficulty. Nevertheless, two important aspects of the study had to do with the acquisition of appropriate practical skills by students for whom the JSS would definitely be terminal. So because the students in the rural area schools were more likely to terminate their education at the JSS level than their counterparts in the urban areas, the choice of JSS was weighted in favour of the rural and suburban area schools. This point and the language problem mentioned earlier influenced the choice of JSS.

The JSS sample was therefore selected using the principles of reputational sampling. The researcher sought and obtained from education officers in the research districts the 'best' three and the 'worst' three JSS in each district, using the BECE results over the past three years as the criteria for judgment. Thus 24 schools were suggested. Each high-achieving school was randomly assigned a low-achieving school so that 12 pairs of schools were obtained. Then 4 pairs of schools were chosen by drawing cards bearing their names from a hat, after the hat had been vigorously shaken to mix up the cards. The decision was to visit each of the 8 sampled schools to observe and interview students and staff. Questionnaires were reserved for only students capable of filling them in properly.

4.9.3 The Teacher Sample

The selection of the teacher sample for the study was influenced by history. Two batches of teachers were attending sandwich courses at the University of Cape Coast from August to October, 1994. The teachers came from schools spread over all the ten regions of the country. A random sample of 45 teachers drawn from the first batch were used for the try-out of the teacher questionnaires and 40 of them completed and returned their questionnaires (89 per cent). Because the results of the try-out did not suggest any need for a modification of the instrument, another sample of 60 was drawn from the other batch and requested to complete the questionnaire. Forty-eight of the 60 teachers completed and returned the questionnaire (78 per cent). The open-ended responses from random samples drawn from the two batches of questionnaires were carefully compared for discrepancies and the responses in both cases followed similar trends. Therefore the two samples were merged. This gave a sample that would pool views of teachers all over the country.

Then during the researcher's first round of visits to the research schools, a third sample of 40 teachers was drawn from these schools. Teachers who had already seen the questionnaires while they were at the University of Cape Coast were excluded. Thirty-six of the respondents completed and returned their questionnaires (90 per cent). Open-ended responses from the school based teacher sample were also compared with those gathered at the University of Cape Coast. There was again no basis to treat the latter sample as belonging to a different

population. Therefore this sample too was merged with the others, giving a final teacher sample of 124. Thus, 124 of the 145 (about 86 per cent) teachers targetted to participate in the questionnaire survey actually did so.

4.9.4 Choice of Other Subjects of the Study

The selection of parents, village leaders, retired teachers, small scale entrepreneurs, craftsmen/women, etc. was executed through chance sampling and through insights gained as the research progressed. The strategies employed included network selection, i.e. accumulating the sample on the basis of participant referrals and quota selection based on sex, occupation, known political affiliation and level of education. The dispersion of parents meant that it was physically impossible to interview parents of students included in the study. The researcher had to count on his luck to meet some of such parents during the period of the study. He attempted to address the problem by asking the students both in the JSS and SSS questionnaires and also during interviews how their fathers felt about the educational reform programme. Although this was not the best way to obtain parents' views about the educational reform, it afforded the researcher the opportunity to compare what the students stated with information gathered from parents through one to one interviews.

4.10 Interviews

Actors at different levels of the education system were interviewed during different periods of fieldwork in order to elicit relevant information. The respondents included officers of the Ghana Education Service (GES) and the Ghana National Association of Teachers (GNAT) in Accra, Sunyani, Bechem, Kenyasi and Goaso. Also, Heads of schools and teachers of sampled schools in the Sunyani, Tano, Asutifi and Asunafo districts as well as some parents and self-employed persons were interviewed. Table 4.6 shows the number of interviewees.

TABLE 4.6 INTERVIEWEES

Respondents	No. interviewed
JSS teachers	33
JSS heads	8
SSS teachers	22
SSS heads and assistant heads	13
Education officials	10
Teachers' Union officials	1
Parents	25
Self-employed	2
Student groups (of five)	50
Students on one-to-one basis	20
Total	184

The questions were kept at a general, open-ended level from which discussion was the further explored during the interview. In some cases, the interview process was kept in focus with the help of a semi-structured interview schedule (Appendix D). In other cases, such as involving parents outside the school system and local entrepreneurs, the questions were to elicit their opinions about the potential of the new school curriculum and problems associated with the change. Wherever possible, interviews were tape-recorded; otherwise, notes were taken.

4.11 Negotiation of Access

Prior to the commencement of the school based aspects of the researcher negotiated entry to the schools from the regional and district education authorities. Armed with a letter of introduction from the Dean of Education of the University of Cape Coast (Appendix E), the researcher negotiated access to schools in the Brong Ahafo Region from the Regional Director who, in turn, wrote to District Directors advising them to grant the researcher necessary assistance (Appendix F). Furthermore, as part of the negotiation process, the researcher taught two modules to teachers attending a sandwich at the University of Cape Coast. This gave him access to teachers on a variety of issues concerning the educational reform programme. The researcher also participated in supervising teaching practice and training senior teacher in schools to play the roles of mentors to probationer teachers. This further improved the researcher's access to teachers and schools.

4.12 Sample Survey

The instruments for the sample survey were the pre-tested questionnaires. The purpose of the survey was to complement data collected from interviewees during the school based aspect of the study. The use of questionnaire survey along with interviews was also meant to facilitate triangulation of the data. At the same time the approach was also meant to supplement the volume of data which were severely constrained by time and mobility.

Six hundred questionnaires were distributed to samples of students in 10 different schools and two sixth forms during the month of October, 1994. The overall response rate was high, resulting in 409 usable responses. The student sample included 200 JSS students, 300 SSS students and 100 sixth form students. The questionnaires were administered with the help of Heads of schools or their Deputies, or teachers delegated by the Head. This made it possible for a very high return rate to be achieved. However, after editing 409 0f the 600 questionnaires handed in by the students were usable. The proportions of usable questionnaires were 70 per cent, for JSS, 83 per cent for SSS and 100 per cent for the sixth form classes.

Questionnaires were also administered to 40 teachers in the schools surveyed and 36 (90 per cent) were returned. Manual analysis of the open-ended items of questionnaires returned by these teachers and comparison with the responses of teachers who filled in the questionnaires at the University of Cape Coast failed to establish any differences in the generality of views held by the two groups Therefore the 36 questionnaires returned were added to those obtained from the university group, giving a teacher sample size of 124.

4.13 Case Studies

In order to carry out an in-depth investigation to see how the planned innovations inherent in the educational reform programme were being operated in the learning environment of the selected schools, intensive visits were arranged with 4 of the 8

junior secondary schools and 5 of the 13 senior secondary schools. The case studies were expected to help the researcher undertake an analysis of the innovations in action, so that contrasts can be made with data collected from other sources. This aspect of the study was carried out from 3 October to 10 December 1994.

The first phase of the case studies were undertaken as a goal-free (Scriven, 1972) exploration to gain insights into issues and concerns that Heads, students and students held regarding the educational reform programme. The researcher took two weeks (6 - 14 October) doing this, while supervising teaching practice in the research region. He also used the period to pre-test the SSS student questionnaire. The second phase of the case studies was undertaken from 21 October to 18 November 1994 in 4 junior secondary and 5 senior secondary schools which had already returned completed questionnaires.

The activities for the case studies included interviews, with Heads of schools, teachers, observation of class activities, collection and examination of documentary evidence from school records and an assessment of the general school climate. The use of both questionnaires, interviews and observations at the same time was meant to elicit as much information as possible within the constraints of time and the mobility of the researcher. It was expected that the use of these methods together would facilitate triangulation of information from the different sources and that the multi-methods approach would reduce the chance

that any inconsistent findings were attributable to similarities of methods (Cohen and Manion, 1980).

The third phase of the case studies spanned the period 25 November to 10 December 1994. This was restricted to one JSS and two SSS in the Asutifi and Asunafo districts. This time the focus was on classroom transactions in order to see samples of student work particularly in vocational subjects. The level of facilities available was also assessed. At this level of enquiry, Parlett and Hamilton's (1976) illuminative approach was followed after observing school environments and antecedents.

4.14 Data Analysis

Data analysis was handled in two ways along the lines employed by Lewin (1990). First, data were analysed and reviewed as they were collected. As interviewing proceeded new insights that came up were noted, probed and further lines of enquiry were developed and pursued to enrich the data. Analysis of documents, private conversations and media reports provided hints regarding informants not previously identified. Thus, analysis at this level was iterative. The second approach to data analysis was more systematic. The contents of interview notes and recorded material were analysed by grouping them under the following themes:

1. PLANNING
   - Evidence regarding need for educational change

- Objectives of reform as perceived by different stakeholders
- Conceptualisation of curriculum by various stakeholders

2. IMPLEMENTATION
   - Implementation management
   - Organisational structures
   - Implementation at school level - curriculum materials, teacher readiness, classroom transactions

3. EVALUATION
   - Framework and guidelines for evaluation
   - Monitoring
   - Teacher assessment practices

4. POTENTIAL AND PROSPECTS
   - Stakeholders' perception of the products of the reformed system
   - Evidence about merits of the educational reform programme
   - Evidence about the demerits of the educational reform programme
   - Evidence about interventionist strategies by various stakeholders:
     (a). the government
     (b). heads of schools
     (c). parents.

This procedure produced different perspectives on a number of issues and also suggested patterns that demanded closer investigation. Also corroborative as well as conflicting evidence between data sources emerged.

Questionnaire data had been pre-coded to facilitate analysis by SPSS. However, the field data revealed that some items had to be recoded to facilitate further analysis. Curriculum materials were intrinsically analysed. Classroom observation data were analysed in respects including teacher activity, student activity and degree of student-centredness.

Quantitative data analysis was begun with a review involving frequency counts, cross tabulations and basic characteristics of the various sets of data. This was followed by searches for relationships that would answer the research questions. Next, associations that appeared capable of answering the major research questions were explored and more sophisticated analysis were undertaken. The main statistics used were T, χ^2, Spearman's rho and Pearson's coefficient of correlation.

Data from interviews, questionnaires and documentary evidence were used in conjunction to explore each research question wherever appropriate.

4.15 Summary

This chapter has described the field work of a study of Ghana's 1987 educational reform programme. The piloting of the study , sampling procedures and execution of the main study have been described. Also described are the methods used to analyse the field data.

Notes

[1] None of the previous educational programmes, with the possible exception of the continuation system (see Boakye, 1983), was fully evaluated and so there is no reliable information about the reasons for their failure.

[2] The major features of the illuminative approach are to study the innovatory programme, how it is applied, what actors consider to be its merits and demerits, and how students· intellectual tasks and academic experiences are most affected. The approach seeks to discover and document what it is like to be participating in the programme as a student or a teacher and discern and discuss the innovation·s most significant features. Therefore it seeks to inform stakeholders in the innovation and help the relevant authorities make decisions about the innovation.

CHAPTER 5

RESEARCH FINDINGS

5.1 Overview

This chapter reports the results of the fieldwork described in the previous chapter. The report begins with the researcher's reflections on the research process and the characteristics of the field data. These reflections are meant to facilitate interpretation of the results. The major findings in relation to the research questions are then reported, followed by a discussion of the findings in relation to the experiences of the selected countries whose educational systems were studied by the researcher prior to the fieldwork.

5.2 The Research Process in Retrospect

Although the procedures followed during the fieldwork enabled the researcher to acquire first-hand knowledge about the status of the educational reform in Ghana, they fell short of what could have been achieved by fully applying the principles of an 'ethnographic' style of research. This is because there was neither the opportunity nor the time to fully adopt this style. Therefore case study with nonparticipant observation and questionnaire surveys were chosen as means of exploring the research questions and other issues that emerged.

Besides these methodological constraints, there were certain political events that overtly or covertly affected the conduct of fieldwork. The fieldwork period was characterised by much finger-pointing and buck-passing among officials of the

Ministry of Education (MOE) on one side and officials of the Ghana Education Service (GES), Heads of schools and teachers on the other (Korem, 1994). The tension stemmed from what was described as "poor performance of the first batch of the SSS students in their final SSSCE examination". This disquiet created for the present researcher some problems of preconceived explanations of significant issues the enormity of which was not immediately obvious to him until he had had time to compare data from different sources and to check out the political affiliations of some informants and respondents.

The tense situation had its positive and negative implications for the conduct of the fieldwork: while some stakeholders were very enthusiastic to talk to an outsider "to expose the arrogance and high-handedness" of certain political leaders connected with the educational reform programme, others regarded the researcher with suspicion because they felt he might put them in trouble by publishing some unsavoury information. For example the wife of one GES official could not be convinced that the researcher was not a government secret agent sent to investigate her husband, who was an open critic of the Government, in order to have him arrested. Throughout the researcher's stay at this research site, he had no cause to believe that there was any reason for this fear. However, this incident is recounted here to show the type of problems that researchers face when it comes to getting information that is of political interest from public officials. A practical implication of this fear was the problem of getting the consent of some respondents to record interviews despite assurances of anonymity.

Notwithstanding these hitches, the present researcher was accorded much more co-operation than he had expected, especially by Heads of schools and teachers, given that he had learnt through an informant that a past Deputy Minister had banned all officers from talking to outsiders about the educational reform programme.

There were also problems associated with the school-based observational aspects of the study. It is rare for Ghanaian teachers to be observed while they are at work by researchers. So formal observations were counter-productive: either the teacher deviated from his usual practice in such a way that it took all but the unseeing to notice the change, or the students were coerced into acting 'unnaturally' to please the visitor. Thus one needs systematically to observe classroom transactions as a participant over a long period of time in order to accumulate information that would be truly representative. The present researcher had neither the opportunity nor the time to observe teachers and students in action over a long period of time. So to improve representativeness, he had to supplement what he saw with questionnaire and interview data and clues from nonobstrusive events and phenomena.

The problems associated with questionnaire administration were anticipated, thanks to the pilot study. It was easy to distribute questionnaires; but getting the returns took a long time. After the pilot study, the researcher thought that if he got the co-operation of Heads of the schools concerned, the problem would be

minimised. The Heads' co-operation was invaluable, but the problem was never completely solved. Getting teachers to complete questionnaire remained difficult.

With regard to interviewing subjects in the schools, the problem was where to hold the interviews. With Heads, it was usually the office and this tended to make the interview so formal that the benefits of an open discussion were not often fully reaped. The researcher eventually began to realise that respondents were more likely to provide in-depth analysis of issues in open places. Therefore the researcher believed he had lost valuable insights in some cases by holding interviews in offices. Much time also tended to be lost because interviews held in offices were often interrupted several times before the end by some naïve visitor or school janitor or secretarial staff.

From the foregoing, one can discern certain limitations which may have influenced the course, and perhaps the results, of the study. First is the time constraint. While the researcher had little time available before he was due to return to the UK, he had to have interviews and administration of questionnaire postponed on a number of occasions because of external pressures on the schools. Second, the results of the Senior Secondary School Certificate Examination in the 1992/93 academic year had been disastrous and there was much tension in schools as they prepared for the 1994 examination. Third, after all the precautions taken by pre-testing questionnaires some of them were still not properly filled in by students and some teachers were reluctant to answer open-ended questions.

Fourth, appointments for interviews were hardly honoured by the interviewees in the first instance for various reasons. In one case the researcher had to make three trips from Cape Coast to Accra before he was granted one interview. Finally although the researcher's job as lecturer in an Education Faculty of a Ghanaian university helped him in gaining access to schools and offices, there were occasions when that role was a disadvantage. In some cases there was the tendency by some teachers to distort information to give a better picture of their school or to exaggerate the degree of the school's deprivation as a way of justifying whatever mediocrity that they feared the researcher might associate with their school.

Therefore where there remain gaps or inconsistencies in the results to be reported which should naturally have been followed up, their significance may be assessed against the background provided.

5.3 Characteristics of the Field Data

The field data for the school-based aspects of the study include count or enumerative data, nominal data, and ordinal data, too. Much of the data relate to teachers and students because they are at the centre of any education reform. Besides, teachers were more accessible than other stakeholders involved in the planning and implementation of the ongoing educational reform programme in Ghana. Moreover, information gathered from schools in their natural settings, portraying the actual behaviour and attitudes of teachers and students are more

likely to provide better insights into the status of the educational reform programme than information gleaned from reports.

The teacher questionnaire data were generated by 124 teachers, 106 (85.5 per cent) of whom were male. In Ghana female participation in tertiary education is generally low and therefore secondary level teachers are mostly male. The proportion of female teachers in secondary schools at the national level is only 22 per cent (Unesco, 1992). The 22 per cent participation in the present study was thwarted by the number of females available. Moreover ten female respondents failed to return questionnaire administered to them.

Majority (91.1 per cent) of the teachers surveyed held university degrees but 60 per cent of them had not gone through a full course of teacher training at any level.

Furthermore, 65 (53.7 per cent) of the teachers had spent less than 5 years in their present schools, 36 (27.8 per cent) had spent between 5 and 9 years in their present schools, 13 (10.7 per cent) had been teaching in their present schools for 10 to 15 years, while 7 (5.8 per cent) had worked in their current schools for up to 15 years. Ninety per cent of the respondents had university degrees, of which 5 per cent were at Master's level.

Tables 5.1 (a) and (b) along with Figures 5.1 (a) and (b) describe the teachers in terms of their ages and level of teaching experience.

Survey data involving students were obtained from 161 JSS students with a mean age of 13.1 years, 279 SSS students with a mean age of 17.7 years and 100 Upper Sixth Form students with a mean age of 21.1 years. Eighty-nine (55.3 per cent) of the JSS students were males as against 53.8 per cent of SSS students. Also 86 per cent of Sixth Form students were males. Furthermore, 18 (11.2 per cent) of JSS students were in Form 1, 23 (14.3 per cent) in Form 2 and 120 (74.5 per cent) in Form 3. Of the SSS students, 78 (31.5 per cent) were in Form 1, 67 (27 per cent) were in Form 2 and 103 (41.5 per cent) were in Form 3.

Tables 5.2 (a) and (b) are cross-tabulations of SSS programme offerings and age, and programme offerings and sex, respectively. The general Arts and Science courses are account for more than 50 per cent of the students in the sample [Table 5.2 (a)] and females are over-represented in the vocational programmes [Table 5.2 (b)].

Table 5.1 (a) : Age Distribution of Teachers included in the Study (N = 123)

Age	Twenties	Thirties	Forties	Fifties
No.	12	65	44	2

Figure 5.1 (a) Distribution of Teachers by Age

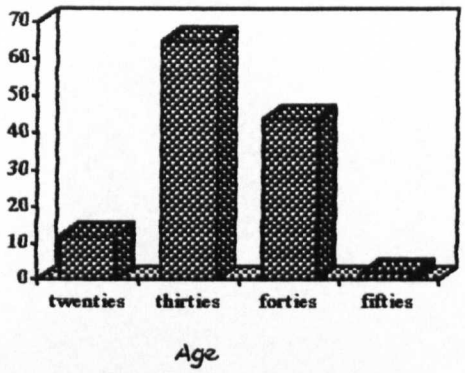


Table 5.1 (b) Experience of Teachers involved in Study

Experience (yrs)	1 - 4	5 - 9	10-14	15-19	20-24	25-29
No.	30	36	32	15	8	2

Figure 5.1 (b) Distribution of Teachers by Experience

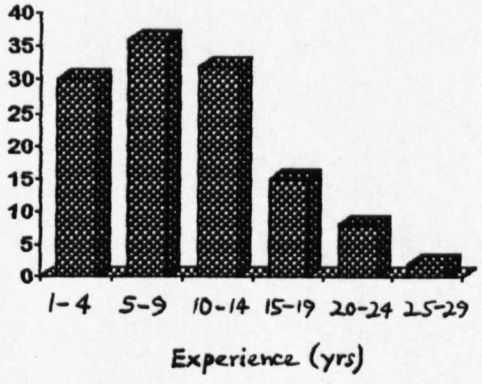


TABLE 5.2 (a) DISTRIBUTION OF SSS STUDENTS BY PROGRAMME OFFERINGS AND AGE

Age /Programme	12-15 years	16-19 years	20-24 years	Total
SCIENCE	4 (1.4%)	63 (22.6%)	3 (1.1%)	70 (25.1%)
ARTS	8 (2.9%)	65 (23.3%)	8 (2.9%)	81 (29.1%)
AGRICULTURE	3 (1.1%)	20 (7.2%)	8 (2.9%)	31 (11.1%)
VOCATIONAL	5 (1.85)	39 (14.0%)	4 (1.4%)	48 (17.2%)
VISUAL ARTS	0 (0.0%)	9 (3.2%)	4 (1.4%)	13 (4.6%)
BUSINESS	0 (0.0%)	22 (7.9%)	4 (1.4%)	26 (9.3%)
TECHNICAL	0 (0.0%)	5 (1.8%)	5 (1.8%)	10 (3.6%)
TOTAL	20 (7.2%)	223 (79.9%)	36 (12.9%)	279 (100%)

TABLE 5.2 (b) DISTRIBUTION OF SSS STUDENTS BY PROGRAMME OFFERINGS AND SEX

PROGRAMME/ SEX	MALE	FEMALE	TOTAL
SCIENCE	33 (11.8%)	37 (13.3%)	70 (25.1%)
ARTS	36 (12.9%)	45 (16.1%)	81 (29.1%)
AGRICULTURE	29 (10.4%)	2 (0.7%)	31 (11.1%)
VOCATIONAL	11 (3.9%)	37 (13.3%)	48 (17.2%)
VISUAL ARTS	12 (4.3%)	1 (0.3%)	13 (4.6%)
BUSINESS	19 (6.8%)	7 (2.5%)	26 (9.3%)
TECHNICAL	10 (3.6%)	0 (0.0%)	10 (3.6%)
TOTAL	150 (53.8%)	129 (46.2%)	279 (100.0%)

In order to maintain the confidentiality of respondents no actual names are associated with data reported in this document. All names of persons who completed questionnaires or were interviewed were changed to serial numbers at the earliest opportunity. Also, the term "Head of school" is used throughout this report rather than Headmaster or Headmistress since such distinction could easily give away the identity of some respondents.

5.4 Major Findings of the Study

5.4.1 Roles of Educational Development and Curriculum Development in Relation to Development Goals

Implementation of the Economic Recovery Programme (ERP) was aimed principally at increasing agricultural productivity, improving the state of nutrition and health care of the most vulnerable sectors of the populace, and expanding the provision of education. Thus, the development goals of Ghana have not been different from those of most other developing countries (*cf.* Lockheed and Verspoor, 1991: 224).

The educational reform programme therefore was a part and parcel of the general structural reforms being undertaken in the country. Education was expected to provide the skills and knowledge base required to address the problems of agriculture and health delivery which are essential in reviving the economy.

Accordingly, the document that explains the rationale of the 1987 educational reform programme points to a link between education and the development of individuals, their societies and their country (Ministry of Education, 1987). Consequently, the adoption of the 6-3-3-4 system of education seeks to provide opportunities for Ghanaian youth not only to acquire basic literacy skills but also to learn practical vocational and technical skills that would eventually qualify

them for skilled jobs or middle and high level manpower positions in the private and public sectors.

In principle, basic education is 'free' and universal for children aged normally between six and fifteen years. This level of education may be terminal or continuing. Therefore the JSS curriculum has been designed to include academic, pre-vocational and pre-technical skills that would enable them function effectively especially in the private sector. The SSS curriculum provides opportunities further to acquire vocational and technical skills that would enable school leavers participate in small-scale industries with backward or forward linkages. This strategy underscores efforts being made to provide education that meets the needs of Ghana's dualistic economy. However, similar efforts in the past, notably the continuation school system, made no impact because stakeholders clearly did not know what the innovation was all about. The next section describes stakeholders' perceptions about the need for and objectives of the present reforms as a background to understanding what is happening within Ghana's education sector.

5.4.2 Need for the Educational Reform Programme

Views on the need for the reforms were pooled from respondents from case study sites and from stakeholders outside the case study sites (see Appendix G) whose contributions helped provide a rich picture of the issues at stake.

Both questionnaire and interview data suggest that most stakeholders felt that there was a need to reform the education system. All 21 Heads and Assistant Heads of junior and senior secondary schools interviewed and 76.4 per cent of 124 teachers surveyed felt that the reforms were necessary and would not recommend an abandonment of the programme. They felt that education reform was necessary to address the increasing unemployment of school leavers, reduce the period of schooling without sacrificing quality.

However, informal discussions and fifteen one-to-one interviews with parents showed that many of them were either disappointed about the course of the reforms or did not understand what the whole issue was about. One parent of a junior secondary school boy expressed his disappointment about what the system is providing and explains why he felt his expectations were not being fulfilled in the following words:

> I sent my son to school to be my eye so that he can tell when someone cheats me out of my income, for instance ...wrong receipt for ***lampo***, wrong Akuafo cheque, you see what I mean? Now the boy does not appear to "know book". Whenever his senior brother writes to me from Kumasi he can't tell me exactly what his brother says in the letter. Maybe there is something wrong with the change (Interview, 15/10/94).

Another parent felt that the reform had introduced unnecessary duplication, leading to erosion of academic standards and an increase in the private cost of education as well. He explained his views as follows:

> The curriculum is unnecessarily duplicative so that the timetable is over-full. For example, the so-called technical drawing, is from what i have gleaned from my child's home work, nothing more than geometry and could have been covered in mathematics. Life skills could have been incorporated into Health Science or Domestic Science - what is now called Home economic. (Interview, 13/12/94)

The respondent further explained that parents had been misled by the use of esoteric terms to believe that the new system is novel and would deliver better literary and practical skills. In his opinion, not much effort had been taken to give parents a true picture of what was to be expected of the reform programme. In particular, he complained that:

> Wrong impressions were created about the benefits of the reformed education system, especially regarding the acquisition of skills by the products of the JSS and SSS which would predispose them to work for themselves without looking up to the public sector for jobs. Now most of the children are leaving school without any such practical skills...nor even the basic academic skills that could have been acquired without the changes now being made (Interview, 13/12/94).

The views of this parent, who was outside the case-study sites, regarding the use of terms came up when a parent was interviewed on one of the case-study sites. This latter parent held the view that a child attending junior secondary should do better than children who were in middle or continuation schools. Secondary education is the gateway to prestigious professions, so that the suggestion that every child would access secondary education was quite intriguing to many parents, especially those whose children hitherto had little prospects of getting into secondary schools for one reason or the other. Thus, as it became increasingly clear that most children would not go beyond the JSS, some parents' judgement

regarding the need for the reforms appeared to be clouded. The interviewee summed up his dilemma in the following words:

> When we had a continuation school the pupils could make all sorts of things. Some of the boys could make sandals; others could make chairs and tables. Some even could weave *Kente* cloth. The girls learnt how to make babies' dresses and coffee table covers. I even bought some of them. but they were not secondary school students. Now we have a JSS and its students cannot make anything. So was there a need to stop the continuation school? (Interview, 15/10/94).

The references made by the two parents of this village suggested that the continuation system had been quite successful in their village, though the programme had made no impact on the national scale. The respondents' views pointed to two issues: the dearth of evaluation data on previous educational efforts and the extent to which stakeholders understand the objectives of the reforms. The next section explores how stakeholders understand the objectives of the educational reform programme.

5.4.3 Objectives of the Educational Reform Programme as Understood by Stakeholders

The official rhetoric of the educational reform centres around the improvement of access to education for all children of school-going age, the provision of relevant skills, the inculcation of cherished social and cultural values and the orientation of school leavers to alternative jobs (Ministry of Education and Culture, 1987).The generality of these objectives appeared to have made it difficult for stakeholders to

clearly tell exactly what the reformed system was expected to deliver at each level. Thus, events unfolding as a result of the educational reform have been interpreted differently by different stakeholders.

As teachers are crucial in disseminating the objectives of any educational activity, it seemed sensible to begin exploring how people understand the objectives of Ghana's ongoing educational reforms by questioning teachers, more especially because a senior official of the Ghana National Association of Teachers (GNAT) had stated during an interview with the present writer that what was happening in the schools was not compatible with the objectives of the reforms.

Accordingly, the views of teachers included in the present study regarding the objectives of the reforms were sought using the questionnaire item: "What, in your opinion, are the main objectives of the educational reform programme adopted in 1987?"

Table 5.3 gives the variety of objectives that teachers associate with the educational reform programme. The number of objectives stated by each respondent ranged from 1 to 5, resulting in a total of 21 objectives couched in 228 statements. The relative frequency of each objective is found by dividing the frequency of its mention by 228 (column 3 of Table 5.3).

To facilitate interpretation of the contents of Table 5.3, it is perhaps necessary to explain that if any of the 21 objectives mentioned were considered a main objective by the all of the 124 respondents, then that objective would have a frequency of 124. Thus, it can be shown that 54 per cent of the respondents considered the vocational orientation of the school curriculum as a main objective of the reforms. This objective accounts for about a quarter of the total number of times the different responses were mentioned. In the same vein, one-third of the respondents felt the preparation of students for self-employment was a main objective while a quarter of the respondents felt the reduction of the time spent in school was a main objective.

Converting the relative frequencies into ranks, (column 4 of Table 5.3) the first six main objectives identified by the teachers, in their order of importance are:

- to provide vocational and technical orientation
- to reduce the cost of education
- to unearth children's talents
- to make education relevant to job opportunities
- to make basic secondary education available to every child
- to enable school leavers to become self-employed.

TABLE 5.3: MAIN OBJECTIVES OF REFORM PROGRAMME AS UNDERSTOOD BY TEACHERS

(N = 124)

OBJECTIVE	f	rf %	RANK
1. To reduce the cost of education	21	9.2	5
2. To enable school leavers become self-employed	39	17.1	2
3. To make the educand vocationally-inclined	67	29.1	1
4. To make education relevant to job opportunities	23	10.1	4
5. To make basic secondary education universal	21	9.2	5
6. To reduce the time spent in school	33	14.5	3
7. To unearth children's talents	4	1.8	9
8. To train the whole person	5	2.2	8
9. To provide middle level skilled workers	11	4.8	7
10. To inculcate sense of cultural awareness	2	0.9	11
11. To broaden the scope of education provided	2	0.9	11
12. To provide scientific and technological training	1	0.4	17
13. To meet challenges of current world situation	1	0.4	17
14. To promote good teaching and learning habits	1	0.4	17
15. To make schools community based	1	0.4	17
16. To introduce continuous assessment	1	0.4	17
17. To train the child to dealwith environment	1	0.4	17
18. To develop leadership qualities in children	1	0.4	17
19. To create employment avenues	3	1.3	10
20. To make higher education more accessible to more children	1	0.4	17
21.To ensure analytical diagnosis of causes of students' poor performance in examinations	1	0.4	17

When Heads and Assistant Heads of JSS and SSS were asked the same question during interviews, they identified six main objectives in, order of importance as follows:

- to provide technical and vocational skills
- to reduce time spent in school
- to make education more accessible to every child
- to provide a broad knowledge base
- to provide character training

When JSS interviewees were separated from SSS interviewees, it emerged that the SSS Heads and Assistant Heads consider the main objectives of the reforms to be just three:

- to provide vocational and technical orientation
- to equip students with specific skills related to their communities to enable them earn a living
- to make education more accessible

Thus, while there appeared to be perfect agreement among the two categories of Heads regarding the vocationalisation of the curriculum, the SSS Heads did not seem to be convinced about the importance of such objectives as the provision of character training and the provision of a broad knowledge base. In fact one SSS Head felt some of the subjects introduced into the SSS curriculum, such as life skills, are "unnecessary". But two other SSS Heads felt that character training had

not been adequately catered for because no specific religious instruction was given an allocation on the time table even at the first cycle level.

From the foregoing one can say that the objectives of the reforms were not clear to teachers because there was no perfect agreement on any particular objective as a main objective.

What is interesting about the teachers' understanding of the objectives of the reforms is that some of the teachers could not distinguish between the objectives of the reforms and measures being taken to achieve these objectives. Responses such as: to introduce continuous assessment as part of the evaluation of students' work; to promote good teaching and learning habits; to reduce time spent in schooling , etc. are means by which the stated objectives of the reforms may be achieved.

The teachers' perception of what the system seeks to deliver therefore provides the basis for understanding the public outcry when the results of the first batch of the SSS students for the Senior Secondary Certificate Examination were published. The central issue is that the objectives are interpreted differently by stakeholders. For example, the Ghana Bishops Conference consider the improvement of access to education, particularly at the primary level, and inculcation of religious values as the essential objectives of any education system. Therefore they complained

about "the debilitating consequences of some of the changes being introduced in the name of educational reform" (*Catholic Voice*, vol. 73, no. 8,1993: pp. 4-5).

The Government itself did the public no good regarding the clarity of the objectives of the reforms by pandering to public pressure and violating some of the fundamental principles on which the reforms are based. One instance of this was the institution of a remedial course in June 1994 to provide majority of the first batch of the SSS leavers the opportunity to study free of charge and improve upon their performance in the first Senior Secondary School Certificate Examination held in November/December 1993. The reason for this measure was that only 1,354 (3 per cent) of the 43,105 candidates who sat for the SSSCE qualified for the proposed university entrance examination. Of course there was nothing wrong in giving students a second chance. But in this particular case, the measure taken appeared to be misguided because, in principle, grade repetition is forbidden under the reforms and therefore should not have been tolerated on a national scale. That aside, in the schools visited, the remedial classes only concentrated on theoretical subjects. Heads of schools had no funds to procure necessary material for the resit students to do any practical work. One Director of Education complained:

> Heads have no funds to purchase materials for practicals. Yet the Ministry of Education has directed that Heads should procure materials for the (remedial students') practical examinations (Field Notes, 10/10/94).

Some Heads who looked beyond qualifying for university entrance were quite disappointed that there was so much confusion regarding the major objectives of the reforms. As far as they were concerned, while it was satisfying to have all of one's students qualify for university, it was definitely not a major objective of the reforms that every SSS student, nor indeed even 50 per cent of SSS students should go to university. One Head summed this strand of the argument by saying that:

> Other ways of determining success should be explored and made public. Merely judging success by the number of students who qualify for university education does not seem to be realistic (SSS Head, Interview 14/10/94).

Echoing similar sentiments, Albin Korem, a columnist on the ***Weekly Spectator,*** declared that:

> It is not enough to evaluate the educational reforms by the performance of SSS students during the final examinations because this only leads to education for examinations.

However, there was one Head who felt that there was no need to be apologetic about the "poor" results of the SSS leavers. As far as he was concerned the exam results are "a reflection of the fact that the reform programme at the moment is a shambles" (Interview, 19/10/94).

The data of the present study therefore suggest that there was no consensus regarding the major objectives of the 1987 reform programme. Neither were the objectives clearly understood by stakeholders.

5.4.4 Planning and Implementation of the Reform Programme

The educational reform was not an entirely new idea; it was based on an educational policy that had been adopted, albeit never fully implemented since 1976. Nonetheless the government's announcement about the nationwide implementation of the programme took "front line" staff in the education business by surprise and the decision was therefore opposed by the Teachers' Union (GNAT), the Conference of Heads of Assisted Secondary Schools (CHASS) and the Ghana Catholic Bishops' Conference. The grounds for opposition were: first, that what the Government sought to implement was a different version of the 1976 programme. Thus, stakeholders had no idea at all about the feasibilty of the proposals inherent in the new system. This doubt on the part of stakeholders was because the "experimental" phase of the 1976 programme had been carried out only in regional capitals and a few urban areas and therefore there was no idea as to how the reform programme would fare in the rural areas on a nationwide scale. What gave this argument some power was that even the experimental programme in the urban areas had not been evaluated and therefore could provide no data that would inform the 1987 reform programme. Moreover, implementing both a new structure and content at the same time on a national scale was considered too

much, particularly since necessary infrastructure had not been put in place. The Ghana Catholic Bishops' Conference summed up the mood of opinion leaders regarding the hasty implementation of the reforms when it issued a communique in which reference was made to how the Bishops had cautioned Government "against haste and the introduction of of systems based largely on untested memoranda, without necessary input and conditions being in place" (Excerpts from Communique of Ghana Bishops' Conference, ***Catholic Voice***, vol. 73, no. 8, 1993, pp.4-5). The GNAT had insisted on a phased implementation of the programme but to no avail. So did CHASS fail in their bid to make the first four batches of the SSS students do four years instead of three. Thus, as if to tell the political authorities that "we told you so", the following were typical of responses given by those charged with the responsibility of actually implementing the reform programme:

> The planning and mapping of the reform programme was (sic) wrong. The problem of teachers wasn't fully addressed. For example there isn't a single science teacher in this school... Professionals (Headmasters and teachers were not consulted during the planning and implementation process (Head of an SSS, Interview data, 19/10/94).

> The education reform was planned, adopted and is now being implemented without consultation with those in charge of education in the regions and the districts...Implementation has been strictly top-down, with no room whatsoever for alternative views from stakeholders.(Notes from private conversation with senior officials from a Regional Education Office).

One can discern from the complaints above that the opposition to the implementation of the reform programme stemmed from stakeholders being

marginalised during the planning of the structure and content of the new education system. Some commentators have interpreted the stakeholders' reaction as a ploy to sabotage the reforms in the manner that other innovations had been treated (see, for e.g., Bennett, 1993). However, the results of the present study could find no evidence to support the sabotage hypothesis. On the contrary what teachers, education officials and opinion leaders tried to avoid was another failure of yet another experiment aimed at correcting the structural problems of the education system. It is true that the need for reform had been elaborated by the Dzobo Committee in 1973 and a reform in line with recommendations of that Committee was adopted as policy by the government then in power. It is also true that the previous programme was never fully implemented. But it is purely speculative to assume that officials and teachers would sabotage the present programme if it was not rapidly implemented.

What the information available suggests is that the government was for some reason (probably in fulfilment of World Bank/ IMF macro-economic conditionalities, though this is denied by one commentator in a publication under the auspices of the Bank - Bennett, 1993:51) determined to ignore all the cautions with regard to a more careful review and phased implementation and launch the reform on a national scale in September, 1987. This it did with scant attention to detail. Thus the idea to implement was criticised not just by "the middle class and elite groups who were monopolizing both a large proportion of governmental resources for education" (Bennett, 1993: 50 ff.) but significantly by those who

could smell impending disaster in an educational enterprise. The following excerpts from iterview data from case studies illuminate the reasons why the programme was initially opposed.

> Although teachers and GNAT were invited to serve on committees on the reform, they had no say; they were mere rubber stamps (GNAT Official, Interview, 13/ 12/ 94).

> Everything concerning the reform, from the very beginning, was dictated from Headquarters (Accra). The Secretary of Education (in 1987), Dr Abdallah, declared that anyone who stood in the way of the reform would be crushed...As a result of the lack of consultation and involvement of Heads and educational administrators at the grassroots, we now have a structure that threatens to erode educational standards and content that does not permit flexibility in programme choices (SSS Head, Interview, 09/11/94).

Other respondents pointed out some of the lapses in the new programme that could have been avoided if ordinary teachers and headteachers had been given a chance to participate in the decision-making as professionals. The following excerpts show that the bone of contention was not a class struggle but a matter based on educational judgment by those on whom actual responsility for implementing the programme rested.

> The very idea of beginning the implementation of the reform programme at the JSS level shows the haphazard manner in which the entire programme was planned. Do we water a plant from the stem or from the roots? Proper planning would have convinced the Government that the reforms should have started from the primary school while necessary infrastructure was put in place and human and material resources were mobilised for the vocationalised JSS and SSS curricula (Senior official at a District Education Office, Interview, 02/11/94).

> The implementation of the reform programme was in a rush; it should have been done on an experimental basis before the full scale implementation. Material and human resources were not available before the implementation was begun...The reform should have started at the primary school. There are students in SSS who can't write their names (SSS Head, Interview, 11/11/94).

> We have been supplied a gas cooker and for our vocational (home economics) programme. But we can't use them. How can we get gas in this village? There is no electricity supply either...So the equipment is lying idle...Nobody came to find out what we would really need. At the moment we have no teacher for core science (Head of village SSS, Interview, 08/11/94).

> The planning and implementation have been unsatisfactory. No initial consultation and dialogue. Right now we lack essential inputs while some existing facilities are not being utilised. For example, we have science equipment lying idle in this school. We could have offered an elective science but are forbidden to do so. Programmes are dictated from Accra without consultation (SSS Head, Interview, 07/11/94).

Apart from highlighting the barriers to or lack of participation by knowledgeable stakeholders at the planning stage of the programme, the data also raise issues regarding programme offerings. The Head of every single SSS visited was either dissatisfied with the programmes the school had been told to offer or the provisions that had been made to ensure the success of these programmes. All Heads of rural area schools visited complained about lack of teachers, especially for science, technical and vocational subjects. Also Heads of every junior secondary school visited, including those in the towns, complained about lack of tools or workshops or both.

Despite these criticisms, however, many of the respondents identified a number of steps that had been taken by the government to usher in the reforms. Among these measures were:

- the mapping of schools;
- the organisation of a national in-service training course for prospective heads of junior secondary schools which were to be opened in September, 1987;
- the use of the mass media and leaflets to disseminate information regarding the change from the middle school system to the junior secondary school system and the phasing out of the 5-year secondary school and 2-year sixth form programmes;
- the organisation of in-service training courses for teachers of the various clusters of subjects in the JSS curriculum;
- the commissioning of people to prepare new syllabuses and other people to text books for the new syllabuses;
- the supply of pavilions to underprivileged communities to enable them construct structures for JSS to take off;
- the supply of tools boxes to junior secondary schools; and, at a later stage of the implementation process,
- the organisation of in-service training courses for teachers of senior secondary schools.

The research data do not contradict the occurrence of these events. What the data do suggest is that many of the measures taken were quite ineffective not only because they were done in a rush but also because the top-down centralised power structure that characterised the execution of the reform plan encouraged no initiative from those on the ground so that the innovators failed to get the critical information it needed to avoid a false start.

Despite the strong feelings about the strategy used to implement the programme, some commentators believe that it was a sensible strategy in view of past educational experiences. Bennett (1993), for example, thinks that the strategy adopted by the government is interesting. He explains that:

> Because the middle class and elite groups were monopolizing both a large proportion of governmental resources for education, as well as most of the places in the higher echelons of the existing school system, there was strong opposition to the reform program. This opposition was so persistent that implementation was always postponed for one reason or another. Government thus decided to introduce the new system in 1987 ***without having prepared adequately for its implementation***. This was a conscious decision to defeat the opponents of the reform, with the strategy to implement the new structure on a nationwide scale and solve the problems afterward (Bennett, 1993: 51, emphasis mine).

The resistance implied by the commentator especially with regard to the implementation of the programme in 1987 was not because the elite groups wanted to sabotage the programme. It was simply because the infrastructure that would facilitate a sensible take-off of the programme was not there. The rush decision led to a neglect of primary education and one of the effects of this neglect is that there are now students in junior secondary school who cannot write their names. Of course the people want education that would place a premium on practical skills and expand effective access. But this is only meaningful in the long term when literary skills are also improved. Therefore the opposition was all about ensuring that necessary facilities were available to provide both literary and practical skills. That is why stakeholders requested a gradualist approach which

seems to have been misinterpreted by some people as another round of opposition to change by a privileged few.

5.4.5 Stakeholders Views About the Structure and Content of Educational System Introduced Under the 1987 Reforms

The data presented here involve information that gives the pulse of the nation as a whole concerning the structure and content of the new system of education and then information from case studies that illuminate the general points raised by commentators on the national front. Accordingly, the analysis begins with two events reported in the Ghanaian Press about the relevance of the present school curriculum as well as problems arising from the nonparticipation of stakeholders during the critical stages of the educational reform programme.

The first of these events was reported in the *Daily Graphic* of October 6, 1994. According to the report, Professor Ampene, speaking during the 1994 William Ofori-Atta Memorial Lectures, declared that the educational reform programme had failed its first acid test because the school curricula were neither making learning as real as possible nor responding to the demands of the local environment. He explained that:

> If a school is situated by a river, it is expected that a certain number of graduates would end up being fishermen and it is a disservice if that school does not offer lessons in fishing.

The case studies of the present study were carried out in a predominantly agricultural area. Agriculture is a compulsory subject in schools covered by the case studies, just as it is in every other school in the country. What is at issue then is whether a certain number of the students in agricultural area schools would end up being better farmers than their unschooled parents. The data of the present study show that a certain number of students from the area will certainly know many things about agriculture but would be unlikely to end up being better farmers than their parents because the students are not being exposed to practical agriculture. One Assistant Headmaster, himself a trained agricultural science teacher, explained that there were no funds to support practical agricultural activities. He explained that the vagaries of the weather made rain-fed farming unattractive while there were no funds to raise poultry or undertake projects in animal rearing. Thus, unless and until Government can provide the money to enable schools provide training in poultry keeping and animal husbandry on a practical basis, no success can be achieved by forcing schools to offer agricultural programmes.

The second event is about a speech delivered by Mr Paul Effah, Registrar of the University of Development Studies, to delegates attending the Second Triennial Conference of the Ghana National Association of Teachers (GNAT). The speaker was happy that the new education system provided "a broad kowledge base, character training, cultural awareness as well as the development of technical and

vocational education...(thus making) the educand a complete person" (*Ghanaian Chronicle*, October 13-16, 1994, p. 6).

Mr Effah then lamented that only 18.2 per cent of the candidates who sat for the Senior Secondary School Certificate Examination (SSSCE) passed in English; 20.7 per cent passed in Core Science and 17.2 per cent passed in Core Mathematics. The concern here is the way the public tends to judge the success of the programme. The speaker never mentioned performance in the vocational or technical subjects, nor indeed Ghanaian Languages nor life skills. Yet the rhetoric of the reform suggests that these are equally, if not more, important. Therefore the matter is either one of misplaced priorities or inappropriate curricular content. In other words why should the student be overburdened with ten other not-so-important subjects? And if success in English Language, Science, and Mathematics mean so much in the life of the child, why was there the need to introduce so many other so-called skill subjects at the JSS level instead of concentrating on the former subjects to enable children acquire the basic literacy and numeracy skills to facilitate understanding of the vocationalised courses at the SSS level? Data of the present study apear to suggest that the curriculum planners were probably unreasonable to have expected students to assimilate the content of the new materials.

The time required realistically to deliver the kind of instruction expected of the JSS and SSS programmes was investigated by asking JSS and SSS teachers and

their Heads how long they would make the SSS programme last if they had their way. All the Heads interviewed felt four years was a reasonable duration, for at least the first four batches of students following the new programmes. This, they explained, was necessary to provide remedial instruction to ill-prepared first year students before introducing them to the actual SSS syllabuses. The Heads felt that once a firm foundation was laid, the three-year course could be adopted. JSS teachers similarly expressed the need for this provision because they admitted that they really hardly ever complete the JSS syllabuses, so that many of the students end up leaving for SSS inadequately prepared. The SSS teachers also showed that they would consider a four-year period as reasonable, though a small number of this category of teachers were not quite unwilling to deviate from the former duration of secondary education. This subgroup of 'conservatives' is, however, counterbalanced by another subgroup of 'progressives' who would wish the duration of the SSS course to remain firmly at three years (Table 5.4).

TABLE 5.4: SSS TEACHERS' PREFERRED DURATION OF THE SSS PROGRAMME (N = 123)

Duration of SSS course (years)	No. of respondents (SSS teachers)	%
3	14	11.4
4	80	65.0
5	13	10.6
6. - 7	3	2.4
undecided	13	10.6

The Heads were particularly concerned about the quality of the JSS students. The following excerpts show the depth of feelings on the issue:

> The JSS students have a weak academic foundation. I admitted a student whose BECE results showed that he had obtained aggregate 6. In less

than no time we found that this student was barely literate and could not cope with SSS work SSS Head, Interview, 13/10/94).

The quality of students we receive from the JSS is low. For example, somebody came here with aggregate 6 but couldn't cope. We asked him to do science and he couldn't do it; we asked him to Arts and he couldn't do it...(An Assistant Head, Interview 13/10/94).

Products from the JSS are horrible, especially those who are admitted into rural area schools. There was a girl here who was awarded aggregate 6 at the BECE. Yet this girl couldn't write her own name. After the first term she ran away (SSS Head, Interview 19/10/94).

Some of the students have very poor backgrounds. There are some who bring very good grades but cannot write their names. There seem to be lapses in the monitoring and supervision of the BECE. Students who entered secondary school through the Common Entrance Examination were much better prepared. In addition to the poor foundation, the present students are not motivated to work hard because they know they won't be repeated or withdrawn (SSS Head, Interview 04/11/94).

All Heads of the case-study schools complained about the quality of the JSS products. One headmaster categorically attributed the deception they experienced during the selection process to poor invigilation during the BECE and inflated continuous assessment scores fed to WAEC by some schools.

To find out how the ordinary teachers felt about the students under present system a questionnaire was used to elicit their comparison of the present students with students of the past education system. Majority of the teachers (80 %, N = 124) said students of the former system were better; 7 per cent said the present SSS students are better and 13 per cent said they saw no difference between the two groups. The 20 per cent of teachers among the respondents who felt the SSS

students are better than, or at least, the same as students of the former sustem made the following complimentary remarks about the SSS students:

- They are obedient and respectful.
- They are more enthusiastic to learn.
- They have a more responsible attitude to work.
- They are more hardworking and punctual at agric (elective) classes and practicals.
- They are morally better.
- They are creative when guided.
- They are brilliant and hardworking.

On the other hand the 80 per cent of teachers who felt the SSS students were mediocre made the following negative comments about them:

- They are disobedient and highly disrespectful.
- They are ill-prepared; their academic standard is far below average.
- They lack confidence.
- They show no seriosness because of wholesale promotion.

Therefore minority of respondents in the sample appear directly to contradict what their colleagues say. However, ***a priori*** considerations suggest that both groups are probably right in their judgement. As explained in the section on sampling, the teachers who completed the questionnaire came from schools spread all over the country and their views are consistent with what one would expect from the national teacher population, the minority being quite typical of the few schools where the best of everything is available. In this particular case, it was possible to find out the schools of the 20 teachers who praised the SSS students. Fourteen of them came from elite schools which normally recruit the best students. Such students are definitely academically more capable than the type of students who came up for criticism by Heads in the case-study area schools. Majority of the students in the case-study schools are unlikely to gain admission

to the elite schools; they would not even send in applications to such schools, since their teachers who know their real potential, would advise against applying to such schools. So it is hardly surprising that teachers from the elite schools find their SSS students either better than or comparable to their past students. Also, the elite schools normally tend to have less disciplinary problems because majority of the students tend to come from families which belong to networks of 'old boys' or 'old girls' which help these schools in maintaining cultures and traditions and in making proactive decisions that minimise breaches of student discipline. On the other hand the majority of schools in the rural and suburban areas tend to recruit second-best students and are easily deceived by students with good but questionable grades. One Headmaster of a suburban SSS complained that "the so-called good schools admit all the best students." The foregoing analysis suggests that the negative comments can hardly be ignored.

Overall, the data suggest that stakeholders were dissatisfied with the quality of products of the new system. This dissatisfaction was based largely on the performance of the pioneers of the senior secondary school system at the SSSCE and the academic skills the JSS students possessed at the time of entering SSS. The SSS teachers felt that it was the JSS system that was not delivering. On the other hand, JSS teachers passed the buck to the primary schools. This buck passing reinforced the argument by many of the interviewees that the improvement of primary level education should have been vigorously pursued

before the full-scale implementation of the the junior and senior secondary aspects of the reform programme.

Table 5.5 describes the teachers' overall impressions regarding the junior and senior secondary school programmes.

TABLE 5.5: TEACHERS PERCEPTION OF JSS AND SSS PROGRAMMES (N = 123)

VIEWS	f	%
Very useful in terms of vocational and academic preparation	38	31.7
Useful in vocational preparation, but does not ensure higher academic standards by the end of SSS	59	47.2
Not useful in terms of vocational preparation, but does provide adequate academic preparation for further education	11	8.9
Not useful at all; the former system was better	14	11.4
Other: -Whole programme is a shambles; unless something is done urgently, we shall produce generations of illiterates	1	0.8

The data in Table 5.5 suggest that teachers view the educational reform programme with different spectacles. In particular, under a third (about 32 per cent) of the respondents found the reforms, and therefore the JSS and SSS programmes very useful while about 62 per cent found fault with some aspect of the reform programme. About 11 per cent did not find the new system useful at all. The first four views were alternatives suggested by the researcher, with room for respondents to express other views. One respondent was not satisfied with any of the views suggested. He expressed a unique view as follows:

> None of the above reflects my views. The whole programme is a shamles and this country is heading towards a disaster. Unless something is urgently done we shall produce generations of illiterates.

Associations between the way the teachers viewed the reform programme (VIEWPGM), their teaching experience (TEXPNCE), their professional qualifica. tions (PROQUALF), workload (WKLOAD), and the time they had spent in their present schools (TENURE) were explored (Table 5.6).

TABLE 5.6: ASSOCIATION BETWEEN TEACHERS' PERCEPTION OF THE REFORM PROGRAMME AND THEIR SERVICE DATA -correlation coefficients.

	TEXPNC	PROQUALF	TENURE	WKLOAD
VIEWPGM	-0.0911	-0.1005	-0.1625	-0.0530
	(P = 0.316)	(P = 0.269)	(P = 0.072)	(P = 0.561)

All the associations were negative and none of the correlation coefficients was significant on a two-tailed test. Generally, therefore, the data do not support any association between the teachers' perception of the new system of education and their teaching experience, professional qualifications, workload or time spent in their present school.

The unfavourable views expressed by the teachers regarding the reform programme appear to have been influenced by the curriculum materials, especially the syllabuses and textbooks, that they have had to use. The first batch of the SSS students began their courses with few or no text books at all. However, Heads of the schools visited admitted that the text book situation had improved. But the quality of the curriculum materials was another matter. Table 5.7 describes how the teachers felt about the SSS syllabuse.

TABLE 5.7: TEACHERS' ASSESSMENT OF SSS SYLLABUSES (N = 123)

	f	Valid %
All right in all respects	12	9.8
Over-loaded but clearly set out and easy to interpret	38	30.9
Over-loaded, terse and difficult to tell exactly what must be taught and what could be omitted.	23	18.7
Pitched above the level of the students	18	14.6
Not flexible; no room for adaptation to suit local conditions	2	1.6
Poor sequencing; some aspects are based on unrealistic assumptions	2	1.6
Overloaded and pitched above students·ability	14	11.4
Over-loaded, terse , difficult to interpret and pitched too high	10	8.1
Over-loaded and inflexible	3	2.4
Overloaded, poorly sequenced and based on unrealistic assumptions	1	0.8
Over-loaded, difficult content and inflexible	2	1.6
Over-loade, difficult content and based on unrealistic assumptions	1	0.8

Forty-one per cent of the respondents said something positive about the SSS syllabuses, with 10 per cent declaring that the syllabuses were all right in all respects. However, 59 per cent were unhappy with their syllabuses for various reasons (see Table 5.7).

Table 5.8 shows the distribution of the teachers' feelings about the syllabuses for the core subjects - English Language, Ghanaian Language, Maths, Science, Agriculture and Environmental Studies and Life Skills. Altogether, 62 teachers used these syllabuses, of whom 26 used the English syllabus, 1 used the Ghanaian Language syllabus, 18 used the Maths syllabus, 7 used the Agriculture syllabus, 5 used the science syllabus and 5 used the Life Skills syllabus.

Over-loading of syllabuses is clearly the major complaint as over 60 per cent of teachers felt their syllabuses were over-loaded. But there is also some concern that the contents of the syllabuses are above the capabilities of the students, especially in English, mathematics and science.

TABLE 5.8: TEACHERS' FEELINGS OF SYLLABUSES FOR CORE SUBJECTS

VIEWS	Eng. Lang.	Ghana Lang.	Math	Agric Sc.	Core Sc.	L.S	f	%
All right in all respects	2		1				3	4.8
Over-loaded but clearly set out & easy to interpret	8		8	3	2	2	23	37.1
Over-loaded, terse and difficult to interpret	7		2	3	1	3	16	25.8
Pitched above the level of students	6	1	5		2		14	22.6
Inflexible; no room for adaptation	3		1				4	6.5
Based on unrealistic assumptions			1	1			2	3.2
Total	26	1	18	7	5	5	62	100
%	41.9	1.6	29.0	11.3	8.1	8.1	100	

Related to the issue of difficulty level of the content is a complaint by an agricultural science teacher and a mathematics teacher that some portions of their syllabuses are based on certain unrealistic assumptions. Follow-up interviews with teachers revealed that in the case of mathematics, "the unrealistic assumption" was that students had acquired certain levels of competency in mathematics during their ten-year basic education period. In practice, however, because grade repetition is forbidden under the present reforms, many students are moved on to the next higher grade when they have not completed the previous year's work. This creates gaps in their learning and acqusition of mathematical concepts and skills. In fact the writers of the SSS mathematics syllabus drew attention to this problem in the following words:

> Study of mathematics is both cumulative and sequential. So teachers are advised not to skip topics. One year's work must be completed before moving on to the next year's work (***SSS Core Mathematics Syllabus***, p.2).

Unfortunately, SSS teachers cannot abide by this advice for two reasons: first, the differences in levels of attainment in mathematics are too wide among schools and

this makes it difficult to plan any meaningful programme for remedial instruction. Second, given the extensive syllabuses, there is simply no time to complete the unfinished JSS work and then go on to complete the SSS syllabus before the students sit for their final examination.

In the case of agriculture, the "unrealistic assumptions" are that the syllabus writers assumed that every school had access to established farms that can be used for demonstration or, alternatively, that schools have funds to establish such farms.

The same problems regarding the extensive nature of the SSS syllabuses in relation to the time available to cover them as well as the difficulties in interpreting the syllabuses are echoed by teachers of elective subjects. The problem of over-loading cuts across all programmes and all subjects. The difficulty level of the content of the syllabuses is also again highlighted. A quarter of the teachers of elective science subjects complained about subject matter being too difficult for the students, especially in chemistry and physics, and 34 per cent of teachers of elective Arts subjects (N = 71) complained that the content was too difficult for the students and the complaint applied to virtually every elective Arts subject. Similar complaints regarding suitability were made about the technico-vocational, agricultural and business courses, despite the small number of respondents in these subject areas.

Interview data corroborated the questionnaire data on the issues of over-loading of syllabuses and the appropriateness of the content, too. All heads of SSS or their assistants who granted interviews (N = 13) as well as 90 per cent of teachers (N = 22) who were also interviewed, felt that the syllabuses were too extensive and the material was too advanced, given the level of academic preparation the students received into the JSS. For example, the SSS French syllabus demands 560 contact hours against 440 for the GCE 'O' level of the former system. And the present level is rated by the syllabus writers as "higher than the 'O' but not up to the 'A' level (p. 3 of SSS French syllabus). This is despite the fact that only two periods per week are allocated to French on the JSS time table. Yet by some magic wand, it is students with this background who are expected to acquire a level of French in three years higher than the 'O' which lasted five years. In the same vein some material in the physical science syllabuses is rated by teachers as above the advanced level of the G.C.E.. Yet these subjects are allocated only 7 periods per week, 3 of which are reserved for practicals. More examples about the strengths and weaknesses of the syllabuses were identified through an intrinsic study of a sample of the syllabuses in use. Details of these are given in the next section.

5.4.5 Analysis of Curriculum Materials - SSS Syllabuses

In the Ghanaian context especially at the secondary school level, it is very important to give much attention to the quality of teacher materials. There are two reasons for this. First, effective use of pupil materials depends on the teachers' ability to guide students to use these materials. Second, student materials tend to

be in short supply or are often altogether unavailable, so that teachers have to improvise by preparing their own notes. Even where student texts are available, the teachers' attitude to student materials is important because teachers tend to set aside standard student text books in favour of examination crammers and model answers by other teachers who claim familiarity with or have access to marking schemes of the WAEC. The introduction of the educational reform programme has not eliminated this practice. For example, a GBC TV documentary on the education reform programme revealed that some teachers tended to promote their own pamphlets in place of the approved text books supplied by the Ministry of Education (GBC TV documentary, telecast on January 1, 1995). From this point of view, therefore, teachers' own assessment of student materials is much more important than that made by an outsider.

Given these circumstances, the present researcher concentrated on analysing teacher materials at the SSS level, which mainly involved syllabuses for some core subjects, namely Agriculture and environmental studies, Mathematics, Science and Physical Education; and some elective subjects including Agricultural Science, Mathematics, Chemistry, Physics, Engineering Science and Technical Drawing, Applied Electricity and Electronics, Business Management, Home Economics, Typewriting, Economics, French, Government, and Music. Information about student materials were obtained through teacher questionnaire and interviews.

Except for Economics, Literature and Life Skills, student text books were available for each of the syllabuses. However, no other resources, such as slides, tapes or pack of worksheets were found being used in conjunction with student texts. Also, no teachers' handbooks and manuals were available for any of the specially prepared student texts. Copies of the syllabuses and student text books are all supplied to the schools by the Ministry of Education and students pay a token fee for the use of the text books.

Each syllabus document has a preamble that includes a statement relating to needs assessment, rationale and objectives of the syllabus. Syllabuses for the elective subjects stipulate that seven periods per week should be allocated for study of the subjects while the duration for core subjects is three periods per week, except that Mathematics and English are allocated five periods per week. The elective science syllabuses further prescribe three hours of practicals and four hours of theory per week. In the case of core agriculture the syllabus stipulates that two terms should be devoted to teaching the agriculture component of the syllabus while one is allowed for the environmental studies aspect. The Art syllabus describes the structure of the final SSSCE and the nature and content of each component of the examination as well. The elective Art programme itself comprises General (knowledge in) Art which is compulsory and two electives drawn from basketry, ceramics, graphic design, leather work, picturemaking, sculpture and textiles. Each of these subjects is allocated seven periods per week.

The Home Economics syllabus includes Management in Living, Textiles, Foods and Nutrition. The syllabus emphasises that schools offering Foods and Nutrition must have a kitchen garden or at least be able to grow vegetables in boxes.

The Typewriting syllabus specifies that every student taking typewriting must take Business Management, while the syllabus for Business Management says the subject must be taken in conjunction with accounting or clerical and office studies.

Each syllabus is presented in two forms: first as a list of teaching units and topics and, secondly, as as a teaching syllabus, with objectives for each unit and suggested teaching steps for the teacher. Lists of supplementary texts and reference sources for both students and teachers are a common feature of majority the elective syllabuses.

In order to establish connections with the findings of other parts of the present study, an intrinsic analysis of the syllabuses was undertaken. The syllabuses were analysed according to the following attributes:

- the purpose of the teaching unit;
- the development of the content and how it is sequenced;
- the depth of treatment suggested with reference to the levels of cognition;
- inclusion of affective objectives;
- practical difficulties with using methods recommended;
- evidence of assessment procedures consistent with the educational objectives of the syllabuses.

Although every syllabus document had an introductory note that sets out the purpose for teaching the subject, objectives for teaching particular units, in some subjects, were either not given in measurable terms or not given at all. In Ghana it is particularly desirable for teaching syllabuses to clearly indicate what the purpose of each unit is so that the teacher can have a clear way of finding out whether his message is getting home. This is necessary because a large number of the teachers are not trained and need to be guided to focus on essential aspects of the subject matter.

In all of the syllabuses examined, a conscious effort appeared to have been made by the syllabus writers to organise subject matter from the known to the unknown, from the simple to the complex. However, in economics, the basic principles of sequencing were sacrificed by over-indulgence in premature analytical rigour. Also, the authors of the economics syllabus did not quite relate teaching sequences to major economic events and livelihoods within the community and the national economy. But this deficiency was also noticeable in the core science syllabus. Although there was a lot of material accumulated from a research project on ***science, technology and society*** with which many teachers were familiar, the science syllabus made no use of these important resources. Thus the opportunity to sequence the teaching units to reflect the scientific principles used in the local community was lost. What appeared to be true of all the syllabuses was the attempt by the authors to tilt the content in favour of those students who would go on to university. Little attention is paid to teaching science as a way of thinking, a

procedure, a method. Thus no emphasis is given to principles and skills applicable to simple occupations which some of those terminating their education at the SSS level may enter to earn a living. The result of this has been that the syllabuses are not only over-loaded but are also pitched above the capabilities of a large proportion of students. Moreover, the sheer volume of the material gives the teacher no opportunity to emphasise higher levels of cognition. Other syllabuses that seemed to suffer from the defects mentioned are the Agricultural Science syllabuses (both core and elective), as well as the syllabuses for Government, and Applied Electricity and Electronics.

One area that was largely neglected by most of the syllabuses (70%, N = 20) was the need to initiate opportunities for the teacher to explore affective outcomes. In only a few cases, notably in the languages, Business Management, Physical Education , Art and Music were efforts made to cater for the affective domain. But the neglect was serious in some disciplines. For example, in economics welfare issues such as equity versus efficiency, private versus social costs, self-interest versus public interest are not given adequate attention. A curriculum that seeks to prepare a large proportion of the student clientele for productive economic activities needs to draw students' attention to some of the social, environmental and economic problems that can arise from an irreponsible consumption of resources. It is believed, for instance, that Ghanaian farmers degrade the environment by using certain pesticides and weedicides while some fishermen polute the rivers and threaten marine life by using some poisonous

chemicals as bait for fishing. Nowhere in the economics syllabus is attention drawn to the social costs involved in these economic activities. Nor are these issues given due emphasis in the agricultural science syllabus. Rather, the core agriculture syllabus specifies that two terms should be allocated to agriculture and one term to environmental studies when environmental problems could have been treated within the framework of practical agriculture in an integrated form. In science, too, the social costs that are associated with science and technology are hardly stressed.

The pedagogy suggested by the syllabus writers in 70 per cent of the documents examined was quite straightforward, but heavily dependent on the traditional 'chalk and talk' practices common in most classroom transactions in Ghanaian schools. While there have been attempts to include some amount of activity, teachers have not found it easy to implement these either for lack of time or equipment. In the sciences where opportunities naturally exist for a departure from 'talk and chalk' teacher demonstrations take a disproportionate part of the time and student participation is often reduced to passive observation. Little attention is given to student investigation, hypothesis testing and inference.

The pedagogy of the French syllabus is probably particularly difficult because of a serious time constraint, given that those taking French at the SSS level have very weak backgrounds as a result of the poor provision for the language at the JSS level. On the other hand the pedagogy recommended for the vocationally-

oriented syllabuses, especially general agriculture and home economics, is based on the assumption that certain basic inputs would be available. The results of the present study show that in the case of Foods and Nutrition component of the Home Economics syllabus, many schools do not have the basic "kitchen gardens" for teaching purposes and vegetables have to be bought from the open market. Consequently, the quality, frequency and variety of practical work tends to depend upon the amount of funds that the Home Economics department can mobilise. Most of the time student fees are the major source of funding even for the final practical examinations.

The pedagogy suggested for the Applied Electricity and Electronics syllabus illustrates a different version of the pedagogic difficulties. The syllabus and the recommended pedagogy assume knowldge in Physics of the standard expected of elective physics students. But in reality Applied Electricity and Electronics is taken by technical students who do not take elective physics.

With regard to assessment, just about half of the 20 syllabuses examined gave details about how student achievement is to be assessed and evaluated.The development of effective teacher assessment and evaluation systems is generally problematic because of external examination backlash. Pressures to coach students to reproduce what Chief Examiners of the WAEC want tend to discourage assessment and evaluation aimed at improving teacher performance and more permanent student learning. That is why , except in the French and P.E.

syllabuses where assessment procedures are suggested to reflect the social function of these subjects, no other syllabus contains assessment procedures that underscore any intrinsic values other than external examination success.

From this analysis one may draw the conclusion that the syllabuses do not give any direction that would facilitate a change of attitude to teaching and learning that reflect the general objectives of the educational reform programme: content is unrelated to the learning environment and community life; pedagogy does not stimulate new thinking; and assessment for certification continues to supercede the natural process of assessment to encourage self-improvement and facilitate good planning.

5.4.6 Relevance of Student Text Books to Syllabuses

Asked whether they had any particular books based on the syllabuses in use, 85.4 per cent (N = 123) of the respondents responded in the affirmative. Table 5.9 describes the views of 105 of the respondents regarding the appropriateness of the prescribed text books.

TABLE 5.9: TEACHERS VIEWS ABOUT TEXT BOOKS IN USE

VIEWS	f	Valid %
Adequate in all respects: clearly written, covers all parts of the syllabus, well illustrated and meets the needds of both the teacher and the students	45	42.9
All right for the teacher but too difficult for the students	31	29.5
Poorly illustrated: few or no diagrams or pictures; irrelevant or unfamiliar examples	5	4.8
Incomprehensible to both teacher and students	3	2.9
Does not cover all topics in the syllabus	15	14.3
Difficult for students and does not cover all topics in the syllabus	2	1.9
Poorly illustrated and incomprehensible to both teachers and students	2	1.9
Poorly illustrated and does not cover all topics in the syllabus	1	1.0
Contain serious errors (e.g. Core Science and Agric text books)	1	1.0

Table 5.9 highlights a problem associated with the implementation strategy that was adopted: implementation first, problem-solving later. The result of this was that the first batch of the SSS system went through their courses without relevant text books, especially in life skills, economics and literature. Where there were text books, the teachers found them inappropriate. Because of the haste to implement the reform programme there was no opportunity to try out curriculum materials on a sample of schools so that serious defects could be corrected before the materials were adopted for use on a national scale.

5.4.7 Teacher Readiness for Implementation of the 1987 Reforms

The level of teacher readiness is an important variable that can affect the implementation of an educational reform programme in a significant way. Initial teacher training had not been over-hauled to reflect the changes in JSS and SSS curricula both in terms of new subject additions or content that was not found in syllabuses of the former system. A number of in-service training courses were mounted during the inital stages of the implementation process. But the results of the present study suggest that these courses did not prepare 45 per cent of teachers adequately to handle the new curricula.

TABLE 5.10: TEACHER PREPARATION FOR 1987 EDUCATIONAL REFORMS

Level of Teacher Preparation	f	Valid %
Very well prepared	38	30.9
Quite well prepared	30	24.4
Not adequately prepared	43	35.0
Not prepared at all	12	9.7

$\chi^2 = 18.0406$ DF = 3 Significant at $p < 0.01$.

The data suggest that the teachers' views regarding their level of preparedness for the transaction of the new curriculum materials varied from being very well prepared to not being prepared at all. The four categories of opinions regarding the level of preparation the teachers received prior to the beginning of the implementation of the reforms can be shown to be significant using a chi square test ($\chi^2 = 18.0406$, $df = 3$, $p < 0.01$).

When the data were reorganised into teachers who felt inadequately prepared and those who felt adequately prepared and cross-tabulated with the professional status of the respondents, the result of Table 5.11 was obtained.

TABLE 5.11: FEELINGS ABOUT LEVEL OF PREPARATION ACCORDING TO TEACHER STATUS

	Professional Teacher	Non-Professional Teacher	
Adequately Prepared	27	41	68
Inadequately Prepared	22	33	55
	49	74	123

Not significant on chi square test at the 0.05 level on a chi square test.

The proportion of professional teachers who felt they were inadequately prepared and the proportion of non-professional teachers who felt they were inadequately prepared are 44.9 per cent and 44.6 per cent, respectively. It can be shown that the the association between teachers' feeling of adequacy and professional status is not significant at the 0.05 level on a chi square test, chi square being 0.0011 with 1 df. Therefore it may be unwise to suppose that professional teachers require no further training before they use new curriculum materials. The implication for this is that there is the need for subject associations and the GNAT to step up in-

service training programmes for their members to update their knowledge and teaching skills rather than depend on the Ministry of Education which appears to be quite incapable of providing effective service in this regard.

5.4.8 How the New Curricula are Transacted

Just as teachers varied in their opinions regarding the objectives of the educational reforms, they also held diverse views about what happened in their schools in relation to the objectives of the reforms. Asked whether what happened in their schools reflected what they considered to be the major objectives of the reforms, 12.2 per cent of the respondents (N = 123) felt that it did so to a large extent; 28.5 per cent felt that it did so in several respects; 48 per cent felt activities in their school reflected the objectives in only a few cases while 11.4 per cent felt that what happened in their schools was not at all related to the objectives of the reforms. Thus, over 50 per cent of the respondents felt there was a gap between school work and the objectives of the reforms.

One objective of the reforms that was most frequently mentioned by respondents was the vocationalisation of the curriculum. A questionnaire item was therefore used to find out whether teachers felt that there was a genuine link between practical work and classroom work. Of the 123 respondents, 44.7 per cent felt that practical work and classroom work were related to a large extent; 49.6 per cent felt that practical work and classroom work were related only in a few cases, while 5.7 per cent felt that there was no link at all between classroom work and

practical work. Thus, about 55 per cent of the teachers felt that much remained to be done to marry practical work and classroom work.

Other data sources appear to suggest that the 45 per cent of respondents who felt classroom work and practical work were related was an exaggeration. During follow-up interviews some teachers interpreted practical work in a narrow sense - such as performing an experiment to illustrate a scientific principle or theory. On the contrary, what the question sought to elicit was whether teachers felt that the mathematics , science, geography, economics , etc. that they thought were being applied in the playing field, on the school farm, in the wokshops and the market place. In particular, did teachers design their lessons to reflect reality of activities in which students are engaged outside the classroom, and activities which they will be engaged in on leaving school? In other words did teachers think that they were doing anything differently as a result of the educational reform programme?

The above issues were explored by asking teachers who were already teaching before 1987 whether they felt that they had had to adjust their teaching strategies as a result of the educational reform. Eighty-five (69.1 per cent) of the respondents were already teaching before September 1987. Of this number, 71 (83.5 per cent) felt that they had had to adjust their teaching methods as a result of the implementation of the 1987 educational reform programme. Table 5.12 describes what the teachers say they now do differently.

TABLE 5.12: WHAT TEACHERS CLAIM TO BE DOING DIFFERENTLY AFTER SEPTEMBER 1987

ACTIVITY	f	%
Carry out continuous assessment regularly	29	40.8
Emphasise activity / discovery methods	29	40.8
Frequently use discussion (Question and Answer) rather than lecture method	2	2.8
Relate teaching and learning to the environment	1	1.4
Use simpler language forms	2	2.8
Use existential / phenomenological approach to teach Christian Religious Studies	1	1.4
Frequently integrate and let students apply lessons taught	1	1.4
Use more teaching aids	3	4.2
Spoonfeed students slowly	2	2.8
Do nothing innovative; just follow the syllabus	1	1.4

One thing that the education authorities in Ghana may find consoling is that 97 per cent of the respondents claim to be doing something which in some way may facilitate instruction and understanding. The last two strategies are the odd ones and require more careful consideration. Although spoonfeeding students can hardly pass as good practice, the respondent felt the need to do this because that appeared to be the way forward, given the weak bacground of the students. However, the fact that some others tried to overcome the same problem by using simpler language forms shows that there are other superior ways of coping with students with a weak foundation.

Overall, Table 5.12 does not suggest anything really innovative regarding the strategies teachers say they now employ. Indeed one wonders what kind of teaching was done in the past if teachers did not use the strategies they mentioned. The real issue, though, is whether the teachers do actually use the strategies they have outlined. Data from non-participant observation and interviews do not wholly support these claims.

The only activity mentioned by the respondents which could not be faulted relates to keeping of continuous assessment records. Failure to do this can attract severe sanctions. The exercise involves much paper work (which teachers loath!) and for many teachers what goes on the continuous assessment forms may be entirely unrelated to actual assessment. Faced with heavy work-loads and large class sizes (a minimum of 50 in the big schools), teachers find it difficult to carry out effective assessment. One teacher appeared to suggest that continuous assessment records lack validity when he commented on his questionnaire that: "It needs courage to complete the continuous assessment forms honestly."

The difficulties the teachers appeared to have regarding continuous assessment seem to reflect the lack of variety in their methods of assessment. Asked about the assessment methods they used 29.8 per cent of the respondents (N = 124) said that they set regular written exercises based on each unit of instruction, while 4.8 per cent conduct a written test based on the term's work. No teacher mentioned using an oral test on its own as an assessment method, nor were individual and group projects considered as useful assessment strategies in their own right. However, 20.8 per cent of respondents reported using written tests in conjunction with projects involving individuals and groups, 8.1 per cent used written tests and projects but never used oral tests in conjunction with these methods of assessment. The data therefore underscore a need to get teachers to appreciate the value of oral work and group projects as well. These methods not only bring variety to the

assessment process, but can also cut down the time the teacher spends in scoring written exercises.

The claim that teachers now emphasise discovery methods was hard to justify. It is true that more science equipment and teaching materials for geography and technical and vocational subjects have been delivered to schools than was the case before the reforms were introduced. Nevertheless there are still shortages and the shortfall in supplies varies from school to school. Whether the availability of equipment has increased the use of activity methods is another matter. In most of the schools visited, teaching was observed to be based on teacher exposition rather student discovery through purposeful activity. In the laboratories of two schools visited, bottles of reagents covered with dust were observed lined on the shelves and work benches, suggesting a long period of non-use, though science teaching went on .

An anecdote involving science teaching is recounted here to illuminate the luke-warm attitude to the use of discovery methods in teaching. The researcher and the Head of the Science Department of one school observed a lesson on ***the termite*** taught by a practice-teacher. The practice-teacher used a diagram of the termite he had drawn on a card board to help him (not the students!) describe the insect's physical features. Throughout the lesson, no equipment in the lab was used . Neither did the teacher make any reference to the activities of termites in teachers' backyard gardens close to the laboratory.

As explained elsewhere in the present document, Ghanaian teachers are not used to researchers sitting in their classrooms while they are at their job. So the presence of practice-teachers made it easier to get some insight into classroom practice by listening to the kind of advice and counselling that senior teachers gave to the practice-teachers. On this occasion, therefore, the researcher paid rapt attention to the counselling the Head of Department gave to the practice-teacher. The Head of Department remarked that the diagram of the termite was too small and could not be clearly seen by students at the back.(which was true) and that there was the need to label the diagram more carefully (also true); to distribute questions more equitably... These, for all we know, could be what many of the teachers meant by "emphasis on activity methods".

At the end of the Head of Department's discourse, this writer asked him whether the school had any magnifying glasses. "We have quite a number," he said. There were also plenty of termites in the bushes just behind the laboratory. So the lesson could have been taught by engaging the students in group activities to study and describe the structure of the termite and try to find reasons why some of its parts are shaped the way they are. They could then learn to draw the insect from the way they see it under the magnifying glass. On the economic importance of the termite, there was abundant evidence of destruction caused by termites in gardens around. At the same time, students saw poultry on free range around teachers' houses feeding on termites. Students' attention was never drawn to these

activities of the termite around their own environment. Thus they lost the opportunity to see how the termite is really important in their own environment.

It would be unfair to say that the majority of experienced teachers in Ghana do not know how to organise their lessons along the lines suggested above. The researcher's host admitted that they would like to teach that way, but could not do so because the pressure of external examination forced them to impart knowledge rather teach for understanding. The implication of this is that no matter the quality of teacher training provided by the universities and teacher training institutions, once in the schools the young teachers will tend to do things the way their senior colleagues do them; so that attitudes will remain unchanged and curricular changes will be of no consequence.

5.4.9 Impediments to Transacting the New Curricula

In this section, the focus is on the following:

- availability of facilities needed to promote the kind of teaching expected under the educational reform programme;
- the practical problems encountered hy Heads and teachers;
- the views of teachers and Heads regarding the advantages and disadvantages of the reform;
- student perceptions about the reforms; and
- teachers' and students' attitudes to the objectives of the reforms.

Data reported elsewhere in the present work suggest that about 41 per cent of teachers included in the study were satisfied with syllabuses in use and an equivalent proportion of the respondents were also satisfied with the text books that go with these syllabuses. A questionnaire item tried to elicit from teachers what they considered to be necessary facilities needed to ensure effective teaching under the educational reform programme. Table 5 13 describes the respondents' views on the issue.

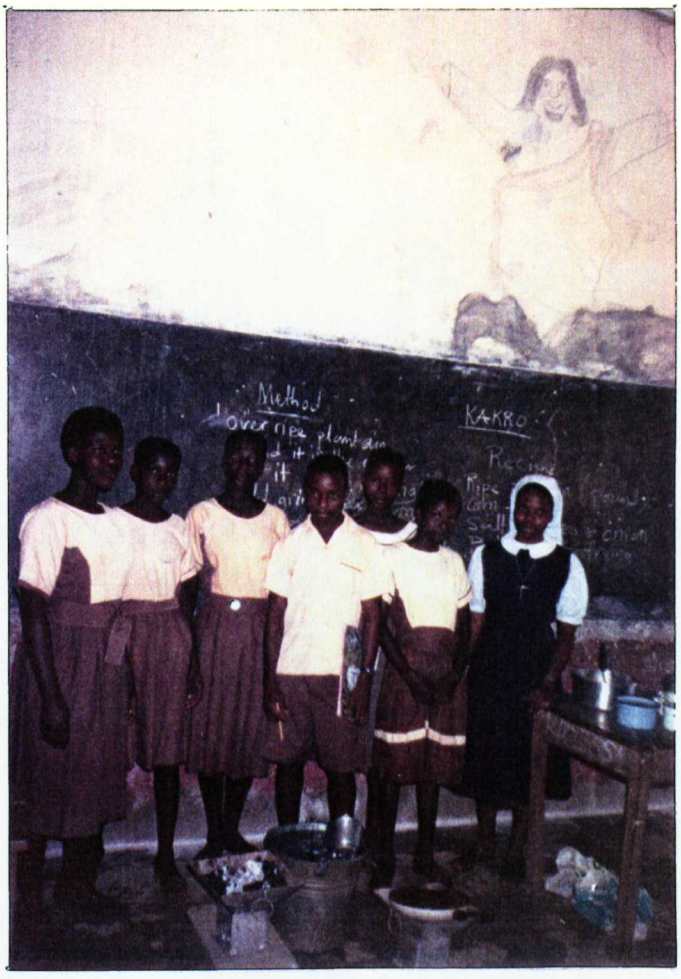
TABLE 5.13: REQUIREMENTS FOR EFFECTIVE IMPLEMENTATION OF NEW CURRICULUM

REQUIREMENT	f	%	Rank
Well trained teachers and instructors for technical and vocational subjects	33	11.8	4
Adequate supply of text books	59	21.1	2
Equipment and tools for technical and vocational subjects and workshops, too	75	26.9	1
Well stocked libraries	8	2.9	7
Adequately equipped labs	38	13.6	3
Teacher incentives	23	8.2	5
Audio-visual material	22	7.9	6
Accommodation on campus	5	1.8	9
Properschool buildings	8	2.9	7
Smaller class sizes	1	0.4	12
More periods for practicals	1	0.4	12
Electricity supply	2	0.7	10
Funds for rearing animals listed in (agric) syllabus	2	0.7	10
Big farm land	1	0.4	12
School-industry link	1	0.4	12

Table 5.13 suggests that the most important requirement is the provision of workshops and equipment for vocational and technical subjects. Coming from teachers majority of whom were not vocational or technical teachers, the finding highlights the problem of providing equipment for the vocational and technical courses, which in turn, goes back to the implementation strategy that was adopted. Technical and vocational education is expensive and it was not to be expected that every school would be adequately equipped from the onset. The present study

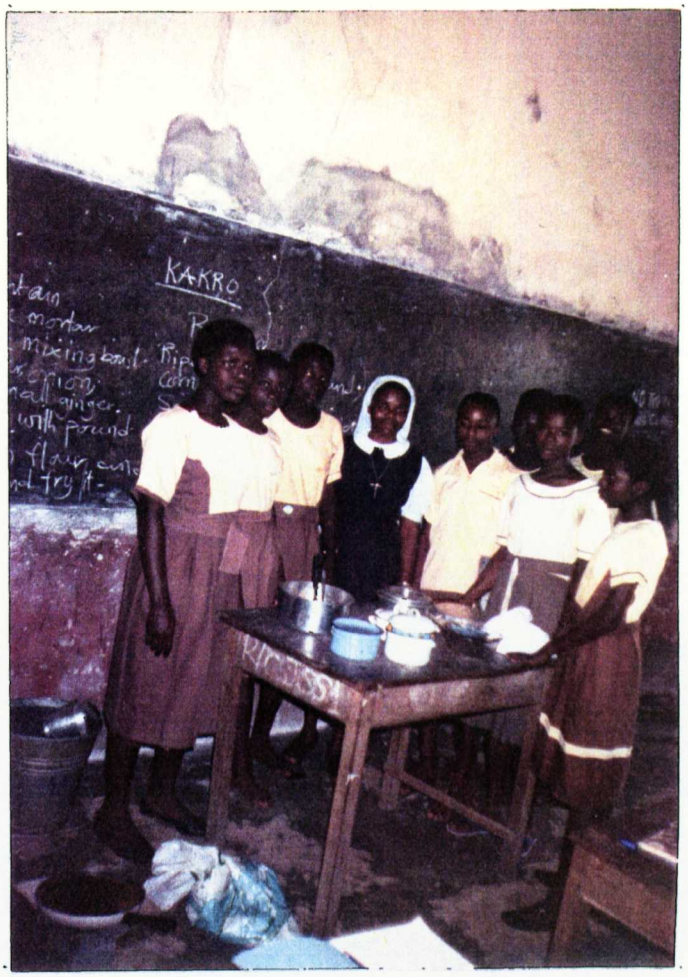
seems to suggest that a rush into a nationwide implementation of the reform is one of the reasons for the lack of equipment in many schools, especially those that depend upon Government for all their supplies.

Observation and interview data suggest that the need for equipment and tools for vocational and technical courese is more urgent at the JSS level than at the SSS level. Only one JSS among the case-study schools had a proper workshop, provided by the district PTA, which it shared with a cluster of other schools. But there were no adequate tools and so instruction was all theory - even in the workshop. Other schools lacked both workshops and tools ; and in one case, there were also no qualified teachers for the vocational and technical subjects. Material that was readily available for vocational work at the JSS level in the case-study schools was grey baft meant for needle work which two of the case-study schools offered. Overall, some teachers seemed able to cope with the problems arising from the lack of tools for vocational subjects, such as catering, by advising students to borrow utensils from their parents. However, such effort was rare indeed. The picture on the next page shows how one school tries to teach practical catering despite shortage of equipment. For majority of the schools offering catering, practical sessions such as depicted in the picture overleaf was done only once a term. Instruction in technical skills was largely theoretical because of shortage of tools. On the average, schools reported the ratio of tools such as hand saws, hammers, etc. to students as 1:15 which means that in a 90-minute lesson, a JSS student can have access to a tool for only six minutes.



Photograph 1

The willingness by teachers to improvise is an essential factor on which the success of the present educational reform programme depends. This teacher and her pupils have demonstrated that simple equipment borrowed from the community can serve a useful purpose. Here the students made do with simple coal pots and a couple of frying pans. They prepared ***kakro***, a local dish made from ripe plantain amd maize flour.



Photograph 2
Before the reform was begun home economics was a sex-stereotyped discipline. Here the presence of one boy among these girls suggests that every child is now encouraged to learn the art of cooking.

The SSS teachers appear to be keen about the provision of vocational and technical equipment because it is in these vocational and technical disciplines that some tangible benefits of the reform programme may be revealed. Some excerpts from recorded interviews illuminate this point:

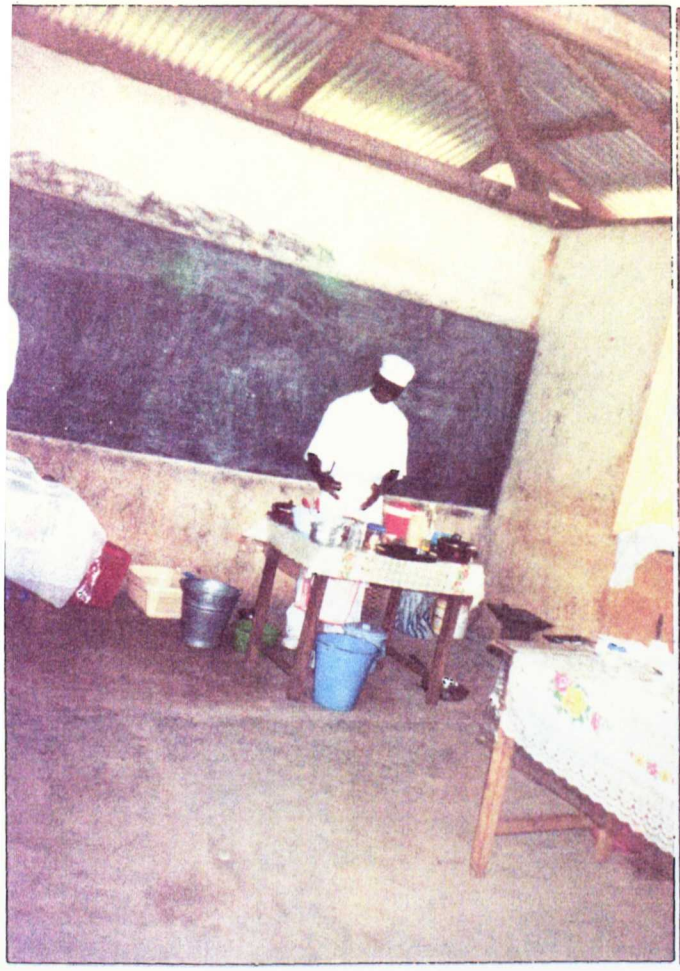
> Those taking vocational courses can produce marketable items by the time they leave SSS. Our final year vocational students produced very attractive items - in graphics, and hand-made decorations on plain cloth, using thread and needle. (SSS Head, Interview, 04/11/94).
>
> The new system is aimed at helping students to use their hands. Students of Food and Nutrition in my school now see the difference between what they can do now and what they could do before entering SSS (SSS Head, Interview, 11/11/94).
>
> Some vocational students who left this school are gainfully sef-employed, using the skills they learnt here. One girl is now a baker in Kumasi (SSS Head, Interview, 08/11/94).
>
> Students in the vocational areas - which in this school include Food and Nutrition, Agriculture and Graphics- can produce marketable iterms. However, those in the General Arts and General Science areas are still following the former system; no change in attitude; bookish education aimed at entering university in order to access white collar jobs. The problem with agriculture, however, is that there are no funds to raise poultry while the problems of agriculture (i.e. food crop production) make it unattractive(SSS Assistant Head, 18/10/94).

Although the researcher wished to meet these students who appeared to have benfited from the SSS programme they followed, it was physically impossible to do so . In the first of the cases cited, the students were busy with their final examination and it was imprudent for the researcher to invade their privacy at that critical time. In the second case, the students had been sent home to collect money from their parents to pay for the materials which they had used for their Food and Nutrition practical examination. The baker could not be contacted either: she lived in Kumasi, about 128 km from the research site. However, the researcher was fortunate to meet a practical Food and Nutrition examination in progress in

the same school and he was able to have a few words with the supervisor without disturbing the examination candidates. The pictures overleaf show what he saw.

The problem of shortage of text books has been discussed already and need not be repeated here. What needs adding , however, is that in some cases, it was not so much the absence of books as their quality that irritated teachers. In particular, science teachers did not like the books produced, prescribed and supplied by the MOE. They preferred books written by the Ghana Association of Science Teachers which had not been adopted by the MOE.

Although the problem of laboratory equipment was ranked third, observation and interview data seem to suggest that shortage of science teachers in the case-study schools was more serious than laboratory equipment. Only one of the 8 SSS visited complained about shortage of equipment but said that it was possible to borrow relevant materials from a nearby school that does not offer elective science. The rest had an adequate supply of equipment, though in one case the supply of equipment by a donor agency preceded the construction of a laboratory to accommodate the equipment. What further came to light was the fact that there were science materials lying idle in schools that a reappraisal of the needs of schools of schools not offereing elective science would result in some schools having their problem of shortage of science materials solved.





Photograph 3

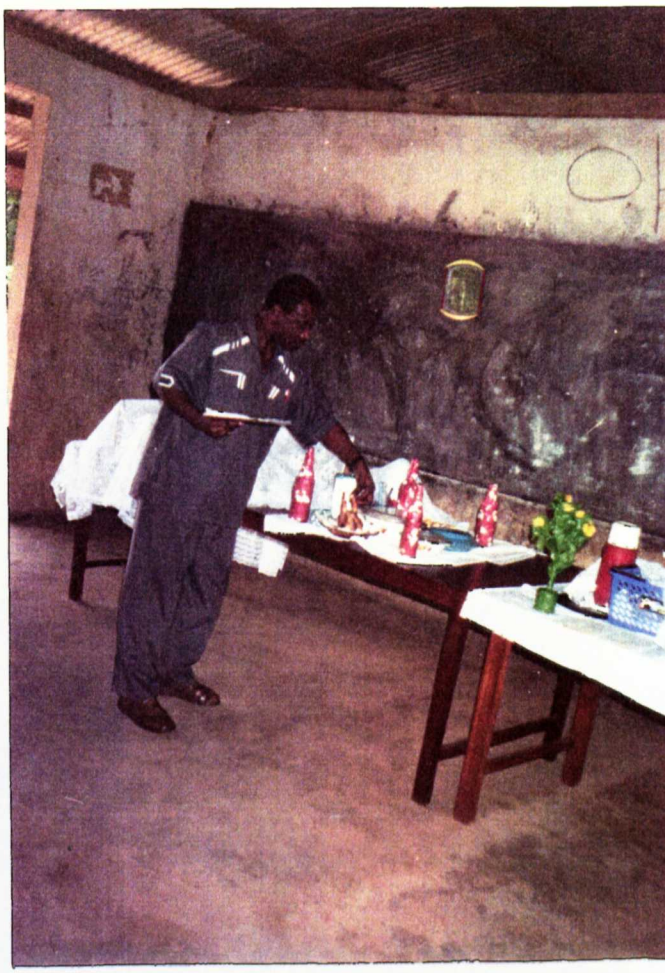
A boy confidently displays his skill in cooking under examination conditions. This shows a healthy sign in the efforts to minimise sex-stereotyping of occupations. A few years back, if a boy offered cookery for the school Certificate / G. C. E. ·O· level he would be ridiculed by his peer group as an effeminate bloke.

Photograph 4

A girl puts finishing touches to the end-product during the Food and Nutrition practical examination in November 1994. She is rubbing shoulders with boys in an area that would have attracted only students of her own sex a few years back.



Photograph 5
The equipment being used for the practical examination in this village school leaves no doubt that the school would have found twenty coal pots more useful than the gas cooker that they were given which was lying idle because there was no gas.



Photograph 6
A supervisor exposes the finished work of the candidates to enable the researcher have a close look. His presence in the school gave the students the assurance that the vocational subjects are considered equally important by the WAEC and the MOE. Failure by the WAEC to assess the vocational subjects at the JSS level as is done at SSS has resulted in practical skills not being taught in many a JSS.

The respondents gave equal weighting to the provision of well-stocked libraies and proper school buildings. Library facilities in the SSS studied were clearly inadequate, but buildings were of a tolerable standard, though on-campus accommodation for teachers continued to be a problem for many of these schools. Most senior secondary schools in Ghana are boarding schools and recruitment of teachers especially to the boarding schools is facilitated when there is good on-

campus accommodation for teachers. This is one of the reasons why the smaller schools suffer a staff shortage in crucial areas. However, the problem of accommodation was not as important to the teachers as their 'incentives' by which they meant better salaries and allowances commensurate with their work-load and extra-curricular activities. The rest of the requirements listed were a reflection of individual teachers' frustrations regarding bottlenecks peculiar to their subject areas. For example the issue of supply of electricity was raised by teachers from rural areas who had no electricity but had been supplied with electrical gadgets as teaching equipment. During an interview one headmaster expressed his frustration in this regard when he said:

> Equipment supplied to us can't be used because of lack of electric power or gas. We have a gas cooker and a fridge...(SSS Head, Interview 08/11/94).

Similarly, issues relating to time allocated for practicals, funds for animal rearing and school-industry link were problems peculiar to agriculture and technical and vocational teachers in particular schools.

One can discern from the data that teachers lack basic inputs such as text books, reference materials and audio-visual materials to introduce variety to their teaching methods, while the vocational and technical curricula are still not properly implemented because of lack of workshops and shortage of trained teachers in these areas. Nonetheless, the teachers felt that the vocational programmes have been useful.

5.4.10 Impediments to Effective Implementation as Perceived by Teachers

TABLE 5.14: TEACHER PERCEPTION IMPEDIMENTS TO EFFECTIVE IMPLEMENTATION OF THE 1987 EDUCATIONAL REFORM PROGRAMME (N = 124)

PROBLEM AREA	f	rf %	Rank
Heavy workload	65	38.0	1
Low quality of student achievement at primary and JSS levels	50	29.2	2
Overfull time table / too many subjects for the students to study	3	1.8	8
Large class sizes (> 50)	17	9.9	3
Lack of basic equipment and infrastructure	12	7.0	4
Lack of teaching aids and reference books	8	4.8	5
Mass promotion of students which provides no incentive for students to work hard	6	3.5	6
Extensive syllabuses	6	3.5	6
Too many periods for elective subjects	1	0.6	9
Amorphous life skills syllabus with no properly trained teachers to implement it	1	0.6	9
No provision for field and business trips	1	0.6	9
Long terms with short vacation periods which makes preparation for the next term hard	1	0.6	9

Asked to list the specific problems they encountered as a result of the implementation of the present system of education, 124 teachers listed a total of 12 problems. These are reported in Table 5.14 in terms of relative importance by ranking the relative frequencies.

Topping the list of problems is work-load. To put this in its proper context, the actual workload as reported by 117 of the respondents are given in Table 5.15.

TABLE 5.15: WEEKLY WORK-LOAD OF TEACHERS (N = 117)

WORK-LOAD	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39
f	9	8	5	62	28	3	2
%	7.6	6.8	4.3	53.0	23.9	2.6	1.7

According to the MOE regulations, a graduate teacher should have a minimum teaching load of 23 and a maximum of 28 periods per week. Based on this condition, the data do not appear to support the teachers' claim of heavy work-

loads, since only 43 per cent of the teachers in the sample exceeded the maximum workload while 18.7 per cent actually had teaching loads much below the minimum. However, Table 5.15 only refers to classroom, farm or laboratory activities; it does not take account of time spent on scoring tests and exercises in fulfilment of the requirements of MOE, or performing duties in other roles as housemasters, cultural activities, etc.. Most teachers interviewed said it was the paper work involved in meeting the requirements of continuous assessment that made their yoke heavy. The teachers who complained most about heavy workloads were those who taught the core subjects. Teachers of mathematics and English and science, for example, usually teach more periods involving large volumes of student exercises to mark. Teachers of these subjects tend to have more work because of the large class sizes (ranked 3 in Table 5.14) and also because it is often difficult to recruit an adequate number of teachers for these subjects. Among the case-study schools were two senior secondary schools which had no science teachers at all while there was a junior secondary school which had had no mathematics teacher for the second year running.

One issue that came up frequently was the complaint about the low academic standard of the students. SSS teachers blamed JSS teachers for doing a poor job, while JSS teachers felt the blame ought to go to the primary school teachers.

The large number of untrained teachers used at the primary level probably explains the low academic achievement at both the primary and JSS levels. As

Table 5.16 shows, the proportion of untrained teachers has remained high since the educational reform programme was begun.

TABLE 5.16: PROPORTION OF TRAINED TEACHERS IN FIRST CYCLE SCHOOLS

Year	Total no. Teachers (Primary)	Untrained	%	Total no. of Teachers (JSS)	Untrained	%
1986/87	64 229	28 389	44.2	31 633	11 204	35.4
1987/88	63 367	26 700	42.1	22 189	10 423	32.0
1988/89	65 727	24 901	37.9	34 624	9 740	28.1
1989/90	54 921	21 146	38.5	35 262	12 314	35.1
190/91	61 216	21 321	34.8	35 262	12 388	35.1
1991/92	66 068	17 287	26.2	-	-	-

SOURCE: GHANA STATISTICAL SERVICE, ***Quarterly Digest of Statistics***, vol. XI, No. 2, 1993, p. 107.

Besides, some trained teachers at the JSS level are not necessarily trained to teach the subjects that they teach. Observation and interview data highlighted this problem. For example, the shortage of mathematics and science teachers has compelled teachers who themselves are not proficient in these subjects to teach them. Teachers in some JSS visited by the writer actually complained that the third year JSS mathematics text book was too difficult. But the problem was by no means peculiar to mathematics. One informant summed up the state of affairs in one other region with which he was familiar (outside the research area) thus:

> (As a result of implementation pressures) teachers were appointed without regard to their academic or professional qualifications. For example a teacher with only one 'O' level pass in Twi manned a JSS in the Sekyere District...Teachers who were engaged to teach technical and vocational subjects were mostly women with dressmaking qualifications who had neither formal initial teacher training nor training in the specific vocational disciplines. P.E teachers were forced to teach science, mathematics, etc. for which they had no training. (Interview, 13/12/94).

The informant's remarks were really not new. A GBC TV documentary exposed similar problems shortly after the reform programme was launched. Two unqualified teachers were featured doling out 'poison' rather knowledge to innocent JSS students. One involved a young secondary school leaver struggling to teach French. The cameras captured this teacher trying to render the question "Where are you going?" in French. The enthusiastic but ill-prepared teacher wrote on the chalkboard: "Ou allé vu?" This atrocity so embarrassed the MOE that it directed the GES to make French optional and restrict its teaching to only those schools that already had or could recruit qualified French teachers.

The other case involved a lady trying to instruct students on how to split a wooden plank using a hand saw. She held the saw the wrong way - in a manner that would have provoked even the most patient of master carpenters, if she were that carpenter's apprentice! Obviously she had not benefited from the hurriedly organised in-service training that preceded the implementation of the reform programme.

Another contentious issue was the mass promotion of students. Because of the MOE's embargo on grade repetition, promotion is automatic from primary class one to JSS 3. And although entry to SSS is via the BECE, promotion within SSS is also automatic. Some Heads do not like the idea, especially since they have reason to doubt the validity of some BECE grades. It is a common belief among teachers that the wholesale promotion is a disincentive to hard work. Interestingly,

some students also hate the idea of wholesale promotion. Among the things that students said they did not like about the JSS system was the promotion of "failed students".

The opposition to automatic promotion again exposes a contradiction of the reforms. While the authorities insist that under the new system there are no failures, thus justifying the case for automatic promotion, the same authorities gave parents the impression that the only passers were those who qualified for university entrance. Naturally, Heads whose students had not done well by this criterion felt humiliated and betrayed because no one appreciated the other areas in which they felt their students had made much progress.

Therefore, one can conclude that teachers believe that the chances for effective implementation will be improved if :

1. class sizes and teaching loads are reduced;
2. basic teaching and learning materials are made available in adequate quantities at the appropriate times;
3. steps are taken to ensure effective teaching and learning at the primary and JSS levels;
4. the number of subjects is reduced and syllabuses pruned to allow greater attention to be given to the 3 Rs before students enter SSS;
5. SSS syllabuses are revised and reduced or the duration of the SSS increased to ensure adequate coverage;
6. systems of assessment and evaluation are improved and closely monitored by inspecting officers.

The above conclusions are reinforced by the changes that teachers would like to see in the present structure and content of education. Table 5.17 lists the changes, showing the differing degrees of emphasis attached to each change.

The most important changes desired are the increase in the duration of the SSS course to 4 years and the pruning of the syllabuses both in terms of length and depth of content and the reduction of the number of subjects both at the JSS and SSS levels as well, with the core subjects being no more than 6. Considered equally important as revising the syllabuses is the need to restrict the opening of new senior secondary schools. Rather, it is argued that existing secondary schools should have been expanded to include a JSS department, under one experienced headmaster /mistress to ensure uniformity of standards within and among schools.

One drawback associated with the call to restrict the opening of new schools, however, seems to be that it would stifle Government's efforts to deboardinise secondary education in order to cut down subventions paid to supplement messing fees required to keep students in boarding schools. Not all respondents thought deboardinisation was a good idea, anyway. One Headmaster devalued the efforts towards deboardinisation as follows:

> The deboardinisation emphasised by the Government as being done under the reform programme is negative because it will encourage tribalism. (Besides) local parents are poor and may not know the importance of education. So they can't help the school to develop (Interview, 19/10/94).

TABLE 5.17: CHANGES IN STRUCTURE AND CONTENT OF EDUCATION IN GHANA AS DESIRED BY TEACHERS

Desired Changes	f	%	Rank
Students should follow a broad, general programme comprising all subjects in the first year of SSS before making subject choices in the second	3	2.4	9
Content should be toned down to reflect the level of students	5	4.1	7
Number of subjects at both JSS and SSS levels should be reduced	16	15.4	2
SSS should last at least 4 years	38	30.9	1
Reform should start properly at the primary school to give a firm foundation	5	4.1	7
Syllabuses should be shortened	9	7.3	3
More comprehensible text books should be provide	3	2.4	9
Syllabuses should be rewritten to link JSS and SSS	1	0.8	14
Teachers' workload should be reduced	3	2.4	9
Elective agric students should take two science electives and one agric elective	1	0.8	14
Elective science students should not offer core science	1	0.8	14
Emphasis should be placed on use of English at the primary and JSS levels	1	0.8	14
Time factor should be eliminated in all tests so that only degree of mastery should be tested	1	0.8	14
The 6-3-3-4 system should revert to 6-3-5-3	1	0.8	14
Text books should be related to the syllabuses	1	0.8	14
Guidance and counselling should be an integral part of the curriculum	3	2.4	9
Repetition of weak students at all levels should be reinstated	7	5.7	5
Class size should not exceed 35	2	1.6	13
Supervision of teachers should be more regular	2	1.6	13
Students in specialised schools (e.g. agric) should be exempt from the core subjects	1	0.8	14
JSS and SSS courses should be done in the same school, headed by confirmed headmasters/mistresses of the former system	8	6.5	4
Continuous assessment weighting should be restricted to 2 class assignments = 40% of the marks; 2 class tests = 40% of the marks; 1 project = 20% of marks, all of which should then be reduced to 40% for the purpose of certification	1	0.8	14
Choices at SSS should be more flexible	7	5.7	5

One GNAT official expressed similar sentiments in the following words:

> A major problem of the reform stems from the fact that all communities are well-to-do, are interested in education and are willing to contribute to the development of education. This is wrong. Yet government has hidden behind this notion and the communities are being over-stretched (Interview, 13/12/94).

The financial responsibilities of parents towards the educational reforms vary greatly. Basic education is supposed to be free, and the fee charged by

Government for the use of text books and for sports and cultural activities is ¢1,500 (£1 = ¢1,630) a year. But in the urban areas, parents can expect to pay over ten times that amount. The variation is often caused by middle class PTA executives who levy high fees with a view to providing school buildings and sometimes even employing part-time teachers; or paying regular teachers to put in 'extra' hours. Thus, the urban poor parent faces just as much problems paying those high levies as the rural poor parent faces settling the ¢1,500 invoice each year. The fact is that parents are now taking on some of the responsibility that Central Government ought to shoulder. Research is needed to determine what proportion of school drop-outs at the basic level is attributable to financial problems faced by parents.

One other issue that the teachers' desires have highlighted is the number of subjects studied at both the JSS (13) and the SSS (11) levels. Half the respondents who complained about the number of subjects would like the seven core subjects to be reduced to no more than six because with so many subjects to study the students are so over-burdened that no mastery can be expected.

Another issue that requires some attention relates to guidance and counselling. It was evident from discussions with teachers and students that many students receive no guidance about the programmes that they select. In many cases JSS teachers simply select courses for students so that the students have no idea at all what will be expected of them. Some students even enter schools without knowing

the type of programmes that the schools offer or the type of jobs or further education or training programmes that may be available to those who study a particular cluster of subjects.

Despite the tall list of changes they desired, the teachers still saw some advantages of the educational reform programme. Asked what they considered to be the advantages of the emerging education system 122 teachers listed eleven advantages altogether (2 teachers could find no advantage whatsoever! Table 5.18).

Table 5.18 again emphasises the importance that the respondents attached to the vocational aspects of the new curriculum. However, the reduction of the period of schooling being cited as an advantage seems to contradict the respondents' desire for the duration of the SSS to be increased.

Similarly, the identification of the provision of broad-based education as advantageous also contradicts the teachers' call for the number of subjects to be reduced. What these two cases appear to suggest is that teachers want changes; yet they do not feel comfortable accepting the consequences of these changes. This is the type of paradox that Lewin and Stuart (1991) have referred to as the planner's paradox.

TABLE 5.18: ADVANTAGES OF THE 1987 EDUCATIONAL REFORM PROGRAMME AS PERCEIVED BY TEACHERS (N = 124)

Perceived advantage	f	%
Opportunity to for students to acquire vocational and technical skills	71	39.9
Reduction in period of schooling	64	36.0
Improves access to secondary education	11	6.2
Provides broad-based education	11	6.2
Encourages continuous assessment and the keeping of cumulative records	8	4.5
Provides opportunity for discovery of the potential of each child	6	3.4
Curriculum is more relevant to the development needs of Ghana	2	1.1
Provides opportunity for mass literacy	2	1.1
Creates basic awareness in the areas of health and environmental protection	1	0.6
Provides opportunity for creativity	1	0.6
Encourages Ghanaian culture	1	0.6
No advantage whatsoever	2	1.1

The two paradoxes identified are even more glaring when the advantages listed by the respondents are compared with what the respondents consider to be disadvantages of the reform programme (Table 5.19).

The paradoxes inherent in the message conveyed by Tables 5.18 and 5.19 taken together are clear: teachers see the need to reduce the duration of pre-university education. Yet they demand a longer duration for the SSS programme and complain that children are leaving school too young to be able to work.Teachers welcome the provision of a broad-based education. Yet they complain that the subjects studied at JSS and SSS are too many.

The inflexibility of programmes is also an issue that has been severely criticised. Heads of schools have complained that the programmes were designed and assigned to schools without consulting them. This lack of consultation has resulted in a number of problems, some of which are described here to show the seriousness of the problem.

TABLE 5.19: DISADVANTAGES OF THE 1987 REFORM PROGRAMME AS PERCEIVED BY TEACHERS

Perceived Disadvantage	f	%	Rank
Duration of SSS programme is too short	70	31.1	1
Inadequate supply of teachers and equipment for vocational and technical courses	40	17.8	2
Students are over-burdened with too many subjects, so that mastery is inhibited and quality is being sacrificed for quantity	23	10.2	4
Inflexible programmes due to limited choices which make change of vocation in future difficult	24	10.7	3
Implementation started in a rush without necessary resources; teachers are unprepared; no consultation with stakeholders	15	6.7	5
Many who leave school at JSS level are unemployable (they being too young or lack employable skills)	9	4.0	7
Some teacher assessment s are unreliable	7	3.1	9
Syllabuses are above the standard of the students	3	1.3	12
Lack of effective guidance and counselling which results in ignorance about programmes	4	1.8	11
Increase in teachers· workload	11	4.9	6
Falling standard of literacy and numeracy	8	3.6	8
Specialisation is begun too early; there is the tendency to slot young people into academics and artisans	6	2.7	10
Financial strain on parents	1	0.4	15
Lack of focus	1	0.4	15
Lack of motivation for teachers	1	0.4	15
Long school terms	1	0.4	15
No disadvantage whatsoever	1	0.4	15

The first problem concerns science elective programmes. Schools selected by the MOE to run science elective programmes either offer the electives Mathematics, Physics and Chemistry, or Biology, Chemistry and Physics. Schools are not allowed to offer the four subjects together, so that students could combine any three of them. The implication of this is that schools that opt for Biology have no chance of preparing their students for the study of engineering and mathematics at the tertiary level or for future careers in these disciplines. Moreover, because of a shortage of qualified science teachers, some schools vacillate between the Biology-Chemistry-Physics combination and the Mathematics-Chemistry-Physics combinations, depending upon the availability of a Biology or a mathematics teacher rather than facilities for teaching the various science subjects. Thus

students who begin with the Biology-Chemistry-Physics combination may be forced to drop Biology for Mathematics in mid-stream with serious consequences.

The second problem concerns the technical and vocational courses. Schools taking a building construction option have no opportunities to offer metalwork or auto mechanics or electricals. Moreover, some of the combinations prescribed for the vocational courses create problems. For example, the Home Economics programme consists of Management in Living, Food and Nutrition and General Art. In one of the case-study schools, this was a problem because the school had no Art teacher and yet the examination for final year students was only a couple of weeks away.

Third, schools that offer business elective programmes cannot offer French and Economics in conjunction. This restriction is criticised because both French and Economics are important for business and students should not be barred from taking them at the same time.

The above examples of inflexibility of the programmes seem to support the complaint that students are forced to specialise too early. A student is forced to opt for bricklaying, for example, right from SSS with little chance for him to be able to pursue a career as an electrician if he later decides that is what he/she wants or can do. More importantly, the limited choices tend to force a sense of failure on

students who find that they have no aptitude in the options available in their school.

Yet, there is no effective guidance and counselling policy by which students may be helped to enter streams for which they have aptitude. And the background to all of these problems and disadvantages appear to stem from the rush in implementing the reforms.

From the foregoing analysis, one can conclude that while teachers admit that there are advantages to be derived from the educational reforms through the provision of technical and vocational skills, these advantages are not being realised because of bottlenecks such as lack of equipment, workshops, trained teachers, poorly designed programmes, unsuitable text books and unrealistic expectations on the part of the education authorities. The implication of this conclusion is that there is a mismatch between the intentions held by the curriculum innovators and the actual implementation in the schools. The next section discusses the factors responsible for these mismatches.

5.4.11 Mismatches Between Curriculum Intentions and Actual Implementation

At the JSS level, mismatches are most pronounced in the vocational and technical aspects of the curriculum. Whereas the curriculum innovators expect every JSS leaver to learn certain basic practical skills in vocational and technical disciplines,

the results of the present study indicate that schools are either not actually not imparting practical skills or where they do, some students are not keen to learn them. Four factors can be identified for this:

1. lack of workshops and inadequate supply of tools and materials;
2. lack of trained vocational and technical teachers;
3. the method of assessing vocational and technical skills;
4. the capacity of the practical activities being taught to generate ready cash for students.

The problem of lack of trained teachers has been rather hard to tackle. In one school, for instance, "the vocational skills teacher merely read from a book and tried to explain to the students" since he neither knew the content nor the methods of teaching the subject.

There is no cause to believe, however, that the teaching of vocational and technical subjects will improve when teachers and equipment are readily available. The method for assessing vocational skills seems to be largely responsible for the lukewarm attitude towards acquisition of practical skills at the JSS level. During an interview one teacher who taught needlecraft felt a major disincentive to the acquisition of practical skills lay with the examination system. All of the 8 headmasters of JSS interviewed felt that it was not worth the effort struggling to get material for practical work since the final examination tests what the students know about producing certain objects rather than what they can do.

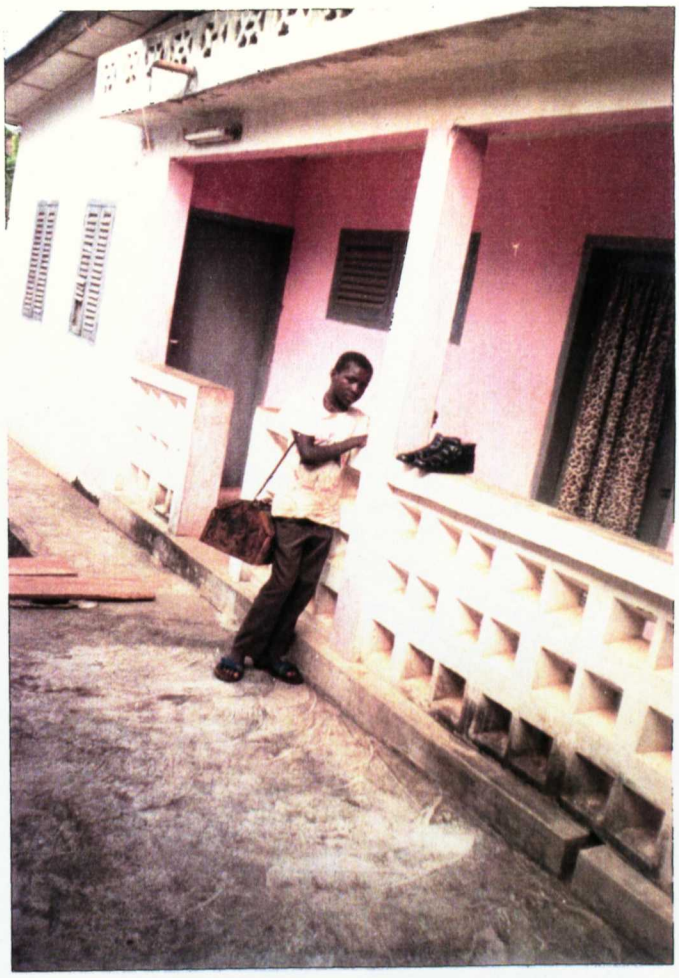
The problem associated with assessment arose when, in 1990, the West African Examinations Council (WAEC) complained that it could not conduct a traditional practical examination for the BECE because of the large number of candidates and examiners' time. Therefore the WAEC introduced the Test of Practicals Examination as a means of assessing students' level of achievement in practical skills. However WAEC expects the students to "demonstrate their achievement by writing short essays or by responding to objective-test items" (Aidoo-Taylor, 1993: 68). This method of assessment cannot find out the psychomotor skills that students have developed or what they can really do. Consequently, the examination does not reflect the objectives of the vocationalised curriculum proclaimed by the reforms. In other words, the method of assessment used by WAEC has low content validity.

The low content validity of the test of practicals examination administered by WAEC is illuminated by the product versus process argument. The main thrust of this argument is that it is possible for a candidate to write an excellent essay describing a process but may lack the competence to actually carry out the process. Conversely, a candidate may be able to produce an object and yet be unable to describe how to produce that object. An even worse possibility is that, through coaching, some candidates may be able to describe processes which they have never really gone through, while other candidates who have gone through the process may lack the language power to describe it. The poor English language skills of JSS and SSS students (see WAEC, *Chief Examiners' Report*

on SSSCE English Language. 1993) suggest that many JSS students belong to the last category. The implication for this is that teachers may spend the time coaching students to write descriptive essays about processes rather than helping them to acquire practical skills.

However, there appeared to be other reasons that influenced students' desire to participate in practical vocational lessons. In some of the schools visited, student interest in practical vocational or technical work was observed to be high where the students could directly consume what they produced or exchange it for ready cash. Where this was the case, the students were willing to borrow tools and equipment to supplement what was available in the school. On the other hand, where no immediate benefit was discernible, the students would cut classes to engage in other more satisfying activities, such as polishing shoes. The photograph on the next page shows one JSS student who often cut vocational classes to polish shoes because that appeared to him to be more lucrative.

At the SSS level mismatches between curriculum intentions and actual practice were also found in the vocational and technical areas. But at this level the problem was related more to shortage of materials and teachers for all the component parts of the vocational syllabus. In one school for instance, there was no Art teacher to teach the General Art component of the Home Economics programme to students who had less than a fortnight left for their final examination.



Photograph 7
This boy prefers shining shoes to attending vocational classes because shoe-shining fetches ready cash. Would the vocational subjects become more popular if students could learn activities that they can easily do to earn money?

Other mismatches stemmed from the level of knowledge that the curriculum innovators assumed JSS students would acquire before entering SSS. Both survey and interview data show that was unrealistic: there were complaints about syllabuses being above the level of students or assuming prerequisite knowledge

that students never had. The curriculum innovators also assumed that teachers would be able to handle the new curricula with little or no further training.

5.4.12 Attitudes and Expectations of Students in Relation to the Objectives of the Educational Reform Programme

The purpose of this section is to illuminate the incongruence between the objectives of the educational reform programme and reality by exploring the subject and occupational preferences of JSS and SSS students as well as the students' attitudes towards higher education and living and working in rural areas are also explored.

5.4.12.1 Subject Preferences of JSS Students

Questionnaire data from the case-study sites indicate that students have little interest in the new subjects introduced into the curriculum in rellation to the more traditional subjects. Table 5.20 describes the JSS students favourite subjects.

TABLE 5.20: JSS STUDENTS' FAVOURITE SUBJECTS

	f	%	Rank
Favourite Subject			
English Language	84	52.0	1
Mathematics	32	19.9	2
Life Skills	6	3.7	3
Vocational Skills	5	3.7	4
Twi (Ghanaian Language)	5	3.1	4
Technical Skills	4	2.5	6
Cultural Studies	4	2.5	6
Social Studies	3	1.9	8
Agricultural Science	2	1.2	9

Majority of the students (52 per cent) said their favourite subject is English while 19.9 per cent chose mathematics as their favourite subject. Paradoxically, it is common knowledge that the standard of English at the JSS level is low and one research collaborator, himself a Headmaster, disclosed that some students have

had to drop out of SSS because they could not follow the teaching in English. In the present study there was no opportunity to explore why the students picked English and Mathematics - subjects in which they were relatively weaker - as their favourite subjects. Systematic research is required to resolve the paradox.

Asked what they liked most about the JSS course, 49.1 per cent of 106 students who responded said that the aspect they liked most was the inclusion of vocational and technical skills subjects which can help them get jobs in future. Yet the same students ranked the skills subjects lowly. It appears, then, that the students were merely repeating the rhetoric that they probably heard the authorities proclaim many times.

Other things that the students said they liked pointed to the influence that adults' ideas or misconceptions about the reforms had had on them. For example, 23.6 per cent of the JSS respondents said what they liked most about the their course was the chance they were given to learn a variety of subjects and 5.7 per cent were thrilled that they had the chance to learn 'secondary school subjects'. These responses reflect the general sense of elation that some pupils and parents felt regarding the introduction of subjects that appeared to suggest connections with higher education. The elation underscores the craze for higher education among school children in Ghana. For example, of the 161 JSS students who returned questionnaire, 160 (94.6 per cent) hoped to continue full-time education beyond JSS, including even those who could not read a paragraph of the JSS English

Course Book intelligibly! In particular, 58.4 per cent of the respondents were sure that they would continue; 38.5 per cent felt they had a good chance of continuing; 2.5 per cent said they would really not be likely to continue their while only one student (0.6 per cent) was certain that he would not be able to continue.

This idea of continuing schooling beyond JSS on a full-time basis tends to give students no motivation for aspects of the curriculum that might give them certain rudimentary skills to make them useful in the world of work.

What the JSS students disliked about their course did not differ much from what other stakeholders mentioned which were reported in earlier sections of the present work. (Table 5.21). However, it is important to draw attention to another apparent contradiction here: the JSS students said they like their course because it offers them a chance to study a variety of subjects, yet they complained that the subjects studied at JSS are too many. This paradox is similar to the one identified in the case of teachers where the data showed that teachers saw the need for change but did not want to accept the repercussions of the change.

TABLE 5.21: WHAT JSS STUDENTS DISLIKE ABOUT THEIR COURSE ARRANGED IN ORDER OF IMPORTANCE

Aspect Disliked	f	rf%
Subjects are too many	70	42.7
Examination questions for some subjects are too difficult	32	19.5
Teachers always beat us up or punish us in some way	18	11.0
No text books	12	7.3
High school fees	8	4.9
Duration is too short	6	3.7
Vocational and technical skills (I hate boys being forced to do sewing which is girls' work)	6	3.7
Cultural Studies	5	3.0
No workshops and tools for practical work	5	3.0
No time for prayers	1	0.6
Promotion of failed students	1	0.6

One unexpected finding that is hard to ignore is the revelation by students that their teachers often beat them up. This claim was never investigated during the fieldwork . But being ranked third by the students, it seems that there is the need to give the matter some attention for a number of reasons:

1. to determine whether there is any correlation between the subjects hated by the students and the and child-beating teachers;
2. to find out whether there is adequate legislation regarding corporal punishment in Ghanaian schools;
3. to find out whether the use of corporal punishment explains dropout rates among first cycle school pupils.

5.4.12.2 Subject Preferences of SSS Students

Like their JSS counterparts, SSS students in the case-study schools tended to prefer the traditional subjects, i.e. those subjects which were already in the old secondary school curriculum. Among elective Arts students, Economics was the most popular, followed by English Language and Geography while among elective science students, Chemistry is the most popular, followed by Physics and English Language. Among elective agricultural science students, English Language is the most popular, followed by General Agriculture and Mathematics. Among vocational students, English is ranked first, followed by Management in Living and Food and Nutrition. Technical students rank wood work first, followed by Technical Drawing; and among Arts students, English Language ranks first, followed by Graphic Design and Agricultural Science. Business

students prefer Business Management most, followed by Accounting and English Language.

TABLE 5.22: RANKINGS OF CORE SUBJECTS BY SSS STUDENTS

STUDENT	***SUBJECTS***					
CATEGORIES	ENGLISH	CORE MATH	CORE SC.	GHANA LANG	AGRIC	LIFE SKILLS
ARTS STUDENTS	1	5	12	9	10	-
AGRIC. STUDENTS	1	3	6	7	2	8
SCIENCE STUDENTS	3	6	-	9	4	9
TECHNICAL STUDENT	6	9	-	7	9	9
VOCATIONAL STUDENTS	1	5	7	8	5	10
VISUAL ARTS STUDENTS	1	2	7	10	3	9
BUSINESS STUDENTS	3	3	9	10	6	9
Mean Rank	2.29	4.71	7.86	8.57	5.57	8.71
SD	1.89	2.36	2.04	1.27	2.99	0.95
Overall Rank	**1**	**2**	**4**	**5**	**3**	**6**

Considering only the core subjects and ranking these subjects in relation to all the ten subjects studied by each student, it is observed that overall, English Language is the students' favourite subject, followed by Core Mathematics and Core Agriculture. Life Skills comes last (Table 5.22). As in the case of the JSS students, SSS students claim English as their favourite subject, when the evidence is that they perform poorly in that subject.

What is evident from the favourite subjects as identified by both the JSS and SSS students is that the students do not fancy the vocational and technical subjects which are supposed to equip them with skills to enter the world of work if they do not enter tertiary education. Except agriculture which is ranked third by SSS students, no other practical subject which students terminating their education at

the JSS or SSS level may use to earn a living is a favourite subject. Even in the case of agriculture, the data do not show that students wish to take up farming if they do not go beyond JSS or SSS. The next section explores this using students' subject preferences.

5.4.12.3 SSS Students' Views about Pre-vocational and Pre-technical courses taken at the JSS level

In order to explore why the skills subjects were not popular among the students of the case-study schools, respondents were asked to indicate what pre-vocational or pre-technical subjects they studied at the JSS. Table 5.24 shows a list of the subjects they studied.

Table 5.23 shows that 68.8 per cent (N = 279) acquired some skill from instruction in pre-vocational or pre-technical subjects and could make or repair certain items of small value. Students who claimed to have acquired some skill in dressmaking said they could make baby dresses, table cloths and napkins. They could also hem garments and make button holes and mend torn clothes as well. Students of woodwork said they could repair broken furniture and make little objects such as money boxes. Students who did weaving or basketry reported that they could make baskets and doormats, while those who studied leatherwork said they could repair shoes and sandals. Catering students said they could make pancakes, doughnuts, chips, babies' bib, etc. Students of graphic design said they

could make posters and sign boards while calabash art students said they could design decorative calabashes.

TABLE 5.23: PRE-VOCATIONAL AND PRE-TECHNICAL SUBJECTS STUDIED BY SSS STUDENTS AT JSS (N = 279)

Pre-vocational / Pre-technical Subject Studied	Acquired Skill	No Skill	Would like to continue	Would hate to continue
Dressmaking / Tailoring	51	20	32	39
Woodwork	50	28	31	47
Weaving / Basketry	35	14	18	31
Leatherwork	14	7	6	15
Graphic Design	5	2	3	4
Catering	16	13	10	19
Calabash Art	9	0	4	5
Picture making	0	2	1	1
Soap making	1	0	1	0
Bead making	2	0	0	2
Metalwork	2	0	0	2
Electronics	2	1	1	2
Sculpture	1	0	1	0
Pottery	1	0	0	1
Needlework	2	0	1	1
Textiles	1	0	1	0
Total	192	87	110	169

While it may appear praiseworthy that two-thirds of the respondents boast skills acquired at JSS, it nonetheless raises some concern that 31.8 per cent of students passed through the entire JSS programme without learning any practical skill at all. Would it be necessary to extend the compulsory skill training subjects to the SSS to enable those with no skill at all to acquire some skill? To answer this question, the data from Table 5.23 was categorised. Table 5.24 shows the data put into the following dichotomies:

1. students who learnt some skill and would like to continue the skill subjects at SSS;
2. students who learnt some skill but would not want to continue with the skill subjects;
3. students who acquire no skill and would want to try again at the SSS level; and
4. students who acquired no skill but would not want to do any skill subjects at the SSS level.

TABLE 5.24: DESIRE FOR FURTHER SKILL TRAINING BY SSS STUDENTS (N = 279)

	Students with some skill	Students with no skill	
Want more skill training	74	36	110
Want no skill training	118	51	169
	192	87	279

$\chi^2 = 0.2019$ df = 1, not significant at the 0.05 level

The hypothesis that there is an association between the absence of any skill and the desire to continue with skill-based subjects was tested. The proportion of students with no skill who do not want more skill-based training and the proportion of students with skill who do not want skill-based training are 58.6 per cent and 61.5 per cent, respectively. It can be shown that this association between having some skill and willingness to study skill-based subjects at SSS is not significant at the 0.05 level by a chi square test ($\chi^2 = 0.2019$, df = 1). Therefore the aptitude to acquire skills or the availability of opportunities for skill training may not be useful in deciding whether students would wish to study skill subjects at the SSS level. Therefore it may be unwise to extend the compulsory vocational subjects to the SSS level. All the same it is worth considering ways of meeting the desires of students such as the 41 per cent of students in the case-study schools who never benefited from instruction in vocational subjects at the JSS and would want to have a second chance. The next section explores why students like the vocational subjects while others hate them.

5.4.12.4 Why SSS students do not want compulsory vocational subjects at SSS

Table 5.25 gives the reasons advanced by 160 respondents for not wanting to continue with vocational skills courses at the SSS level. Topping the list is the aspiration by 34.4 per cent of the respondents to become doctors, engineers and other respected professionals. This represents a covert perception of practical vocational skill subjects as reserved for those incapable of accessing the prestigious professions. This view is more directly expressed by the reasons at the bottom of Table 5.25: "vocational subjects bring little or no income; people do not regard vocational skill subjects; I prefer office work; I prefer other (academic) subjects."

Related to the income factor is the observation by 4.4 per cent of the respondents that there are no benefits associated with the skills offered in their schools. This ties up with the observation data reported earlier that students were more likely to be interested in vocational skill subjects if the end products of practical work could be easily sold for cash or directly consumed by students.

The students' lack of interest (ranked second) may therefore stem from considerations of immediate value within the community. On the other hand, the students' claim that they had no aptitude in vocational subjects reflects the lack of variety in the vocational skills subjects offered in each school. In many schools if the school offers needlework. then every child must learn needlework.

TABLE 5.25: WHY SOME SSS STUDENTS DO NOT WANT VOCATIONAL SKILL SUBJECTS AT SSS

REASON	f	%	Rank
I want to be a professional: doctor, lawyer, engineer, etc.	55	34.4	1
I am not interested; I was forced to do it at JSS	39	24.4	2
I have no aptitude for vocational subjects	23	14.4	3
Vocational subjects do not fit my chosen field of study at SSS	15	9.4	4
Vocational subjects have no benefits	7	4.4	5
I learnt nothing ; there were no practicals	9	5.6	6
Vocational subjects bring no income	2	1.3	7
People do not regard vocational skill subjects	2	1.3	7
I prefer office work	1	0.6	8
I prefer official work	1	0.6	8

Thus, students neither have a chance to choose what they would like or can do. The reason for the lack of choice is shortage of teachers or materials. Indeed 5 per cent of the respondents would not want to study these subjects either because of teacher shortages or because there were no practical sessions.

5.4.12.5 Why some SSS students would have liked more vocational instruction

In contrast, Table 5.26 gives the reasons why some SSS students would like to have continued studying the vocational and technical skills subjects at the SSS level.

TABLE 5.26: WHY SOME SSS STUDENTS WOULD LIKE TO HAVE VOCATIONAL INSTRUCTION AT SSS

REASON	f	%	Motive
1. Because I like pre-voc / pre-tech subjects; I was good at it	35	37.2	Consumption
2. Because it prepares me for future self-employment	32	34.0	Investment
3. Because I wish to use the skills in my chosen career	16	17.0	Investment
4. Because I want to have something else to do in case I am unemployed	12	12.8	Investment
5. Because I want to have a money-earning hobby	9	9.6	Investment
6. Because I want to improve upon my skill	6	6.4	Investment

Each of the reasons given by the students in favour of continuing with vocational and technical skills subjects they started with at JSS (Table 5.26) expresses a motive with economic undertones. As Conroy (1976) admitted, reasons such as the above may be interpreted in several ways. For the present writer, however, the first reason - "Because I like the skill subjects" - seems to express pleasure derived from a service provided by the skill subject teacher. Therefore this reason has a consumption motive.

The other five reasons all express investment motives because they anticipate future benefits.

Based on these interpretations, the data seem to suggest that skills subjects can become popular among students if there are competent teachers to present them in an enjoyable and stimulating manner and, if students are convinced about the actual benefits to derive from these skills when they leave school.

The case studies failed to provide evidence of JSS and SSS leavers using skills they learnt in the communities. JSS Heads reported that those who left school in the past years and could not enter SSS "were roaming the streets". In any case, very little practical work was being done in the junior secondary schools to give the students at this level any adequate skills that they could use. Also, apart from one case where a Headmaster knew that one of his past students had become a successful baker since leaving school, no information was available about SSS

leavers using skills learnt at SSS in their communities. However, only one cohort of SSS students had left at the time of the case studies and so it was premature to assess how skills learnt at SSS were being utilised. That granted, one headmaster felt that in the rural areas, parents were too poor and would not have the resources to support their children to enter into occupations related to the skill subjects offered in the school. This observation raised the issue of whether the vocational skills being taught were related to the needs of the community and within the means of the community.

At the SS level, the leading skills subjects taken by students were woodwork (28 per cent, dressmaking / training (25 per cent), weaving / basketry (18 per cent), catering (10 per cent) and leatherwork (8 per cent). At the JSS, the most widely offered vocational skills subjects were dressmaking (37 per cent), catering (26 per cent) , needlework (20 per cent) and woodwork (11 per cent). By village standards, careers built on skills from these subjects need much money to get started. Thus, even where the necessary skills have been acquired it may well be impossible using these skills without necessary financial support to obtain the basic tools to work with. The other issue is whether students are actually interested in entering into occupations that use these skills. The present study explored that issue by asking students on the case study sites to state what they would like to do if they could not continue their education at the JSS or SSS.

Table 5.27 shows the vocations JSS students would wish to enter into if they did not go beyond JSS.

TABLE 5.27: JSS STUDENT JOB PREFERENCES WITHOUT FURTHER EDUCATION

OCCUPATION	f	%
Dressmaker / Tailor	39	24.2
Hairdresser	21	13.0
Trader	16	9.9
Farmer	13	8.1
Driver	10	6.2
Electrician	5	3.0
Fitter	4	2.4
Footballer	3	1.9
Food vendor	1	0.6
Mason	1	0.6
Butcher	1	0.6
Unemployed	13	8.1

The top two occupations do relate to the leading four skill subjects offered in the schools. However, the third most popular occupation (hairdressing) was not offered by any school in the sample. Moreover, dressmaking and carpentry involve a high initial capital which many poor parents may not be able to afford. The prospects therefore are that, like their predecessors, many of these students are more likely to "roam the streets" if they should terminate their education at the JSS level than entering into these occupations.

There was no association between JSS students' vocational preference and their parents' occupations. For example, in the JSS sample, 17 per cent of parents were farmers but of 13 students who contemplated becoming farmers, only 4 of them were farmers' children. Similarly, in the SSS sample, 28 per cent of the students were farmers and 18 per cent were teachers. Yet only 4 of the 10 students who

considered being farmers were farmers' children and only 3 of 16 students wanting to become teachers were teachers' children.

The students at the SSS level appeared to be aware that there are no white-collar jobs for people of their level of education and experience. All the same, this did not prevent some of them from thinking about having white collar jobs (see Table 5.28).

Three issues emerge from the expectations of SSS leavers unable to enter university, polytechnic or college. The first is the high proportion of students intending to do petty trading. Since the mid-1970s, Ghana has faced the problem of its youth dropping out of school to engage in petty trading popularly referred to as "selling dog chains" and this was one of the things that the educational reform programme sought to correct by providing skills that would encourage students to engage in productive economic activities. The present data appear to suggest that the youth still fancy petty trading more than other occupations of similar status.

Table 2.28 again raises the issue of career guidance. A lack of career guidance is discernible from the fact that SSS students terminating full-time education mainly because they cannot enter polytechnic, college or university think they can get jobs such as accountants or nurses. In the present educational set up these jobs are only open only to those who successfully complete appropriate training in specialised tertiary institutions.

TABLE 5.28: JOBS WHICH SSS STUDENTS EXPECT TO HAVE IF THEY DO NOT CONTINUE IN FULL-TIME EDUCATION BEYOND SSS

OCCUPATION	f	%	OCCUPATION	f	%
Petty Trader	75	27.5	Welder	3	1.1
Farmer	39	14.2	Mason	3	1.1
Pupil Teacher	21	7.6	Office clerk	2	0.7
Dressmaker / Tailor	21	7.6	Fitter	2	0.7
Soldier	10	3.6	Fire Service Officer	2	0.7
Carpenter	9	3.3	Sales Assistant	1	0.4
Artist / Potter / Designer / Poster Writer	14	5.1	Singer	1	0.4
Shopkeeper	9	3.3	Footballer	1	0.4
Messenger / Cleaner	5	1.8	Adult Ed. Facilitator	1	0.4
Repairer of electronic products	6	2.1	Health Care Assist.	1	0.4
Driver	4	1.5	Letter Writer	1	0.4
Won't work: will continue private studies	4	1.5	Evangelist	1	0.4
Nurse	4	1.5	Street Sweeper	1	0.4
Agric Extension Assistant	5	1.8	Police	1	0.4
Accountant	3	1.1	No job	4	1.5

The third matter arising from Table 5.28 is the incongruence between the vocational subjects offered in the schools and the type of services demanded by the communities as reflected in the occupations that the students have outlined. One such occupation is hairdressing which 7.6 per cent of respondents would like to practise, but which was not offered by any school.

The students' ignorance about the world of work was further highlighted by the type of responses they gave to the questionnaire item: "From your experience and that of your friends who have left SSS already, what kind of job do you think you are most likely to get after completing SSS?" Jobs such as architects, accountants and nurses were still mentioned. These responses were of course not based on any actual experience of the students; they merely indicate that the students have no idea about the qualification for these occupations. However, more respondents did realise that they were more likely to remain unemployed. At the same time more

of them felt that they had better prospects of becoming pupil teachers and messengers or traders than farmers (Table 5.29).

Table 5.29 further shows that in many cases, respondents look up to Government as their prospective employer. Asked to state for whom they would wish to work, 252 of the 279 (90.3 per cent) respondents said they would like to work for the Government , as against 27 (9.7 per cent) who would like to be self-employed

TABLE 5.29: SSS STUDENTS' PERCEPTION OF JOBS THAT THEY CAN REALISTICALLY HAVE IF THEY DO NOT CONTINUE IN FULL-TIME EDUCATION

REALISTIC JOB	f	%	EMPLOYER	REALISTIC JOB	f	%	EMPLOYER
No job	47	16.9	--	Apprent. Fitter	2	0.7	Some one
Pupil Teacher	70	25.2	Government	Adult Ed. Asst	2	0.7	Government
Messenger	30	10.8	Government	Typist	2	0.7	Government
Trader	20	7.2	Self	Accountant	2	0.7	Government
Farmer	19	6.8	Self	Nurse	2	0.7	Government
Street Sweeper	8	2.9	Government	Architect	2	0.7	Government
Agric Ext. Asst.	7	2.5	Government	Mason	1	0.4	Some one/Self
Artist/Designer/ Weaver	8	2.9	Self	Hair dresser	1	0.4	Self
Actress	6	2.2	Gvt. /Some one	Police	1	0.4	Government
Dressmaker	5	1.8	Self	Singer	1	0.4	Self
Carpenter	5	1.8	Self	Soldier	1	0.4	Government
Clerk	5	1.8	Government	Sales Asst.	1	0.4	Some one
Health Care Asst.	4	1.4	Government	Prisons Officer	1	0.4	Government
Fire officer	4	1.4	Government	Horticultural Asst.	1	0.4	Government
Tax Collector	4	1.4	Government	Metal worker	1	0.4	Self
Labourer	3	1.1	Gvt ./ Some one	Library Asst	1	0.4	Government
Storekeeper	3	1.1	Self . Some one	Footballer	1	0.4	Some one
Repairer	2	0.7	Self	School Cook	1	0.4	Government

The data therefore suggest that, overall, the objective of providing school leavers with practical skills to enable them enter into self-employment in productive activities that benefit the school leavers and their communities is not being realised.

The eventual occupations of SSS students was further probed alongside those of Sixth Form students by asking both categories of students to indicate what kind of institution they would go to if they had a chance to continue their education. Table 5.30 describes their preferred institutions.

TABLE 5.30: PREFERRED TERTIARY INSTITUTIONS OF SSS STUDENTS (N = 279) AND SIXTH FORM STUDENTS (N = 100)

PREFERRED INSTITUTION	SSS STUDENTS		SIXTH FORMERS	
	f	%	f	%
Teacher -training College	36	12.9	1	1.0
Agricultural College	21	7.5	0	0
Nursing training College	22	7.9	0	0
Polytechnic	28	10.0	0	0
University of Cape Coast	30	10.8	21	21.0
University of Ghana, Legon	68	24.4	59	59.0
University of Science and Technology, Kumasi	61	21.9	15	15.0
University of Development Studies	8	2.9	0	0
University College of Winneba	3	1.1	0	0
Other: Film & TV Institute; Forestry School	2	0.7	2	2.0

The high proportion of respondents in both categories (61.1 per cent of SSS students and 95 per cent of Sixth Form students) expecting to go to university reflects the high demand for university education in relation to other tertiary institutions that provide specialised training for middle level positions in teaching, agriculture, health care, business and industry. In the case of the sixth form students, this is not surprising since the main purpose of sixth forms in Ghana have been to prepare students for university or comparable institutions. It has been the case that students who enter the sixth form believe they must necessarily get into university and some are prepared to continue resitting the 'A' level examination until they get good grades to enter university rather than enter into

the other non-degree awarding tertiary institutions to train for middle level positions. As Table 5.30 shows only three sixth formers contemplate the middle level professional colleges. Comparatively, it may appear that the SSS students are willing to spread out into the tertiary institutions to reduce the pressure on the universities to create places. However, it appears that the SSS students realised from the results of the first batch who passed out that it was extremely difficult to qualify for university admission. So they were ready to enter the colleges and polytechnics. But there is also the possibility that many of the SSS students do not know the requirements for entering some of the vocations they indicated.

As regards what they hoped to study at the university, most sixth formers settled for the professional courses in business (accountancy), law, architecture and medicine. Here, too, the SSS students show a good spread in all areas but about a fifth of them just hoped to take general courses, though one cannot tell whether they knew what they were doing. However, it is clear from both sub-samples that non-career directed university degrees have continued to be popular among students. This is because competition for places on the prestigious professional courses is usually very keen; so students who are anxious to enter university but cannot effectively compete for the professional courses do not care what course they are offered. They prefer any degree course to a middle level non-degree professional course. This appears to be consistent with the general perceptions about occupations in terms of prestige. In Ghana jobs that require a university degree tend to be considered not only more prestigious than others that demand

lesser qualifications but are also perceived to command higher remuneration. The next section explores this notion by analysing the students' perceptions of certain occupations in terms of their perceived prestige and perceived income.

5.4.12.6 Student Perceptions of 23 Occupations in terms of Prestige

A latent objective of the educational reform is to provide the environment for students to appreciate the importance of every occupation, so that students would not look down on any occupation. Therefore it is interesting to find out how students view different occupations. It is also important to find out whether the views of SSS students in this regard are different from sixth form students who are products of the former system. In other words, is the new type of student more egalitarian in his outlook than the student of the former system?

A sample of SSS students (N = 279) and Sixth Form students (N = 100) were asked to indicate the degree of prestige associated with twenty-three occupations on a five-point scale ranging from 'very high prestige' to 'very low prestige'. Foster (1965a) did a similar study involving most of the occupations listed. The present study dropped the occupations 'chief's counsellor', 'Political Party Worker' and 'Actor' because some students in the rural areas were not familiar with the first and third occupations, while the more specific occupation 'M P' was substituted for the second occupation.

.All of the occupations listed were familiar to students. However, as Foster (1965a) pointed out an occupation such as 'farmer' is quite amorphous: the category includes a small proportion of rich cocoa or rice farmers as well as a large band of subsistence cultivators with small holdings. Thus, farmers constitute a very heterogeneous group.

TABLE 5.31 (a) STUDENT RANKINGS OF 23 OCCUPATIONS IN ORDER OF THEIR PERCEIVED PRESTIGE

OCCUPATION	*ARTS STUDENTS*			*AGRIC. STUDENTS*			*BUSINESS STUDENTS*		
	Mean Score	SD	Rank	Mean Score	SD	Rank	Mean Score	SD	Rank
Priest / Pastor	1.44	0.69	5	1.65	0.84	8	1.42	0.81	5
Nurse	1.83	0.57	11	1.94	0.63	11	1.77	0.59	12
Medical Doctor	1.12	0.33	2	1.16	0.45	2	1.04	0.20	1
Policeman	2.14	0.89	14	2.32	0.70	14	2.00	0.93	14
Soldier	1.75	0.75	9	1.45	0,62	6	1.73	0.61	10
Author	1.77	0.79	10	1.87	0.76	10	1.85	1.01	13
Businessman	1.91	0.67	13	1.93	0.85	12	1.73	0.72	10
Farmer	2.46	1.04	15	2.74	0.96	16	2.31	1.09	17
Farm Labourer	3.62	0.62	22	3.81	0.48	23	3.31	0.97	22
Carpenter	2.78	0.73	19	2.81	0.65	19	2.61	0.94	20
Chief	1.63	0.80	8	1.35	0.75	5	1.54	0.65	7
Primary Teacher	2.68	0.83	18	2.55	0.72	15	2.19	0.94	16
JSS Teacher	2.48	2.28	16	2.23	0.67	13	2.12	0.91	15
SSS Teacher	1.54	0.57	7	1.74	0.73	9	1.58	0.58	8
University Lecturer	1.09	0.39	1	1.16	0.58	2	1.12	0.43	2
Car Fitter	2.94	0.86	20	2.74	0.89	16	2.58	0.81	19
Petty Trader	3.27	0.72	21	3.16	0.64	21	2.65	1.02	21
Shop Assistant	2.60	0.72	17	2.77	0.88	18	2.38	0.80	18
Engineer	1.38	0.62	4	1.45	0.62	6	1.58	0.81	8
Lawyer	1.15	0.48	3	1.13	0.34	4	1.19	0.57	3
Office Worker	1.90	0.72	12	1.87	0.72	10	1.53	0.65	6
MP	1.44	0.76	5	1.10	0.40	1	1.27	0.45	4
Street Cleaner	3.70	0.51	23	3.71	0.53	22	3.38	0.94	23

Unlike the Foster (1965a) study which reported the student perceptions of the occupational hierarchy in terms of sex, the present study presents the results in terms of the students' programme offerings - Arts, Agriculture, Business, Science, Technical, Vocational and Visual Arts [Tables 5.31 (a) and (b)]. This is meant to reveal whether student hierarchical perceptions is associated with the kind of

course that the student pursues. In a second analysis, a ranking of the occupations by all SSS students as a group is presented alongside a ranking of the occupations by Sixth Form students (Table 5.32). This affords a cross-system comparison of occupational prestige rankings by students under the new system and those of the old system. The SSS students are products of the new system of education while the Sixth Form students are products of the old system.

TABLE 5.31 (b): SSS STUDENT RANKINGS OF 23 OCCUPATIONS IN ORDER OF THEIR PERCEIVED PRESTIGE

OCCUPATION	*SCIENCE STDNTS*			*TECH. STDNTS*			*VOC. & VISL ARTS*		
	Mean Rank	SD	Rank	Mean Rank	SD	Rank	Mean Rank	SD	Rank
Priest / Pastor	1.54	0.74	7	1.50	0.97	7	1.78	0.92	10
Nurse	1.78	0.69	10	1.90	0.57	11	1.70	0.81	8
Medical Doctor	1.06	0.24	1	1.00	0.00	1	1.12	0.32	1
Policeman	2.29	0.79	14	2.70	0.82	16	2.22	0.83	14
Soldier	1.79	0.71	11	1.40	0.52	6	1.75	0.82	9
Author	1.65	0.82	8	1.70	0.95	10	2.00	0.96	13
Businessman	1.94	0.71	13	2.50	0.71	14	2.05	0.96	13
Farmer	2.79	0.94	18	2.70	0.67	16	2.32	1.00	16
Farm Labourer	3.75	0.61	23	3.70	0.48	22	3.63	0.69	22
Carpenter	3.01	0.72	19	2.60	0.70	15	3.48	0.91	21
Chief	1.46	0.78	6	1.20	0.42	4	1.55	0.81	6
Primary Teacher	2.63	0.81	17	2.90	0.88	18	2.70	1.01	17
JSS Teacher	2.29	0.73	14	2.10	0.57	13	2.23	0.70	15
SSS Teacher	1.76	0.60	9	1.60	0.52	9	1.57	0.59	7
University Lecturer	1.12	0.32	2	1.00	0.00	1	1.17	0.46	2
Car Fitter	3.07	0.89	20	3.30	0.67	20	2.82	0.81	19
Petty Trader	3.26	0.72	21	3.50	0.53	21	3.35	0.66	20
Shop Assistant	2.62	0.83	16	3.00	0.94	19	2.80	0.88	18
Engineer	1.21	0.44	3	1.00	0.00	1	1.40	0.59	4
Lawyer	1.21	0.59	3	1.20	0.42	4	1.35	0.70	3
Office Worker	1.87	0.62	12	1.90	0.74	11	1.90	0.77	11
MP	1.32	0.80	5	1.50	0.71	7	1.45	0.79	5
Street Cleaner	3.74	0.59	22	4.00	0.00	23	3.78	0.45	23

If the new educational system has changed students' attitudes to occupations, one would expect that SSS students' direction of perception will be opposite to that of Sixth Form students; that is, an inverse (negative) correlation coefficient is expected. On the contrary, a remarkably high direct correlation of 0.94 was

found to exist between SSS and Sixth Form student occupational prestige rankings. Thus, there is considerable consensus between students who passed through the former education system and the students of the 'reformed' educational system. Therefore the data suggest that student hierarchical perceptions of the occupations have not changed with the introduction of the new system.

TABLE 5.32: SIXTH FORM AND SSS STUDENT RANKINGS OF 23 OCCUPATIONS IN TERMS OF PRESTIGE

	SIXTH FORM STUDENTS			SSS STUDENTS		
OCCUPATION	Mean Score	SD	Rank	Mean Score	SD	Rank
Priest/Pastor	1.90	0.82	6	1.61	0.98	7
Nurse	2.78	0.75	13	1.79	0.66	10
Policeman	3.12	0.78	14	2.22	0.82	14
Soldier	2.38	0.69	11	1.76	0.75	9
Primary Teacher	3.56	0.89	17	2.62	0.87	17
JSS Teacher	3.41	0.71	16	2.23	0.69	15
SSS Teacher	2.71	0.76	12	1.62	0.61	8
University Lecturer	1.37	0.63	4	1.12	0.41	1
Carpenter	3.98	0.75	21	2.86	0.74	19
Shop Assistant	3.67	0.77	19	2.66	0.83	18
Office Worker	2.20	0.74	9	1.82	0.70	12
Chief	1.92	0.92	7	1.52	0.78	6
Farmer	3.60	1.21	18	2.56	1.01	16
Farm Labourer	4.75	0.56	22	3.64	0.67	22
Author	2.28	0.78	10	1.80	0.87	11
Street Cleaner	4.80	0.59	23	3.83	0.46	23
Engineer	1.54	0.68	5	1.36	0.60	4
Car Fitter	3.39	1.14	15	2.87	0.72	20
Petty Trader	3.80	0.82	20	3.23	0.74	21
MP	1.32	0.60	2	1.36	0.69	4
Businessman	2.13	0.73	8	1.96	0.79	13
Medical Doctor	1.15	0.41	1	1.13	0.39	2
Lawyer	1.34	0.54	3	1.22	0.58	3

$r_s = 0.9414$

The students' perceptions of the occupational hierarchy generally follow the findings of earlier studies (see Foster, 1965a). The various professions take the top ranks. Next come clerical and skilled technical workers and the bottom ranks go to minor artisans, petty traders and unskilled workers.

TABLE 5.33: CROSS-CORRELATIONS OF HIERARCHICAL OCCUPATIONAL PRESTIGE RANKINGS BY DIFFERENT STREAMS OF SSS STUDENTS

	ARTS	AGRIC	BUSINESS	SCIENCE	TECH	VOC. VIS.ART
ARTS	-	0.9555	0.9532	0.9814	0.9145	0.9750
AGRIC	0.9555	-	0.9587	0.9595	0.9061	0.9639
BUSINESS	0.9530.	0.9537	-	0.9558	0.9173	0.9728
SCIENCE	0.9814	0.9595	0.9558	-	0.9124	0.9728
TECHNICAL	0.9145	0.9061	0.9173	0.9124	-	0.9106
VOC. / VIS. ARTS	0.9752	0.9639	0.9728	0.9728	0.9106	-

A detailed examination of the prestige rankings shows a great deal of agreement among the different streams of SSS students regarding the prestige associated with the professions and the minor artisan and unskilled occupations (Table 5.33). But a few differences need a mention. As in the Foster (1965a) study the chief is ranked high along with the professional classes, though the present students rank this occupation lower than their 1965 counterparts. This is inconsistent with the present system's resolve to instil and maintain a cultural awareness in Ghanaian children.

It is also significant that students of the former system (sixth formers) ranked the motor car fitter higher than the rank given to this occupation by the SSS students. Furthermore the prestige rankings given to the farmer and carpenter by the two categories of students are close (farmer ranked 18 by sixth formers and 16 by SSS students; carpenter is ranked 21 and 19 by sixth form and SSS students ,respectively). The finding suggests that the curricular changes made as a result of the educational reform programme have not changed students' perceptions of minor artisan or semi-skilled occupations. In particular, it is significant that the farmer has been ranked so low despite the central place that agriculture has been given in the curricula of the present system, being made compulsory for every

student throughout primary and secondary education. Moreover, the government introduced an honours system for farmers to raise their image. Under this system, each year the first Friday of December is a statutory holiday in honour of farmers and farmers who distinguished themselves in some aspect of farming activity are awarded substantial prizes by the Ministry of Agriculture. All these measures do not appear to have failed to induce Ghanaian youth to change their perception of the farmer. This illustrates one of the instances of mismatches between curricular intentions and reality identified by the present study in that agricultural education does not appear to be providing the type of formation that would change students' attitudes to agriculture and encourage them to want to utilise the theoretical knowledge acquired in the classroom. Paradoxically, the students wish to take up petty trading which is ranked lower than farming. Therefore the matter seems to be one of seeking easier options where the hard choice is between occupations with generally low prestige rankings. Farming involves greater physical exertion than petty trading and involves greater risks, such as market failure and drought. In other words, like school leavers of the former system, the students under the reformed system are more inclined to opt for white-collar jobs or easier activities in the distributive sector rather than engage in the predominantly agro-based activities of their communities.

5.4.12.7 Student Rankings of 23 Occupations in terms of Perceived Income

In order to determine whether students associated the prestige accorded an occupation with the income that it fetches, both sub-samples of SSS students and Sixth Form students were asked to rate the same occupations according to the level of income they believed these various types of jobs commanded. As in the case of prestige ranking, a five-point scale ranging from 'very high income' to 'very low income' was used (Table 5.34).

Overall, there is a very high direct correlation between perceived income rankings by SSS and Sixth Form students (rs = 0.9305) and also between perceived prestige and perceived income rankings (for Sixth Form students, rs = 0.9360; and for SSS students, rs = 0.9217) [Table 5.34].

Like students of the former system, students of the new system associate perceived occupational prestige with perceived income.

The association between perceived income and perceived prestige is consistent with the view that in the job market "prestige and income factors do not operate independently" and collaborates Foster's earlier conclusion that preference for white- collar jobs is based on the knowledge that these jobs are more highly paid.

TABLE 5.34: STUDENT RANKINGS OF 23 OCCUPATIONS IN ORDER OF PERCEIVED INCOME

OCCUPATION	SIXTH FORM STUDENTS			SSS STUDENTS		
	Mean Rank	SD	Rank	Mean Rank	SD	Rank
Priest / Pastor	3.03	0.82	12	2.82	1.07	14
Nurse	2.90	0.42	9	2.66	0.87	12
Policeman	3.04	0.66	13	2.80	0.90	13
Soldier	2.61	0.77	8	2.39	0.97	9
Primary Teacher	3.61	0.74	20	3.32	0.87	19
JSS	3.37	0.71	15	2.92	0.81	15
SSS Teacher	3.05	0.58	14	2.28	0.89	7
University Lecturer	1.78	0.88	5	1.40	0.70	2
Carpenter	3.39	0.85	16	3.39	0.95	20
Shop Assistant	3.61	0.79	20	3.24	0.92	16
Office Worker	2.97	0.78	11	2.62	0.88	11
Chief	2.48	1.04	7	2.54	1.11	10
Farmer	3.60	1.18	19	3.30	1.18	18
Labourer	4.68	0.65	23	4.47	0.68	23
Author	2.91	0.66	10	2.30	1.11	8
Street Cleaner	4.62	0.60	22	4.46	0.78	22
Engineer	1.52	0.61	4	1.70	0.87	5
Car Fitter	3.45	0.81	17	3.24	1.02	16
Petty Trader	3.56	0.70	18	4.06	0.89	21
M P	1.19	0.46	1	1.43	0.88	4
Businessman	1.79	0.74	6	1.87	1.18	6
Doctor	1.27	0.49	2	1.36	0.64	1
Lawyer	1.45	0.58	3	1.41	0.77	3
Correlation with perceived prestige			**0.9360**			**0.9217**

Correlation between SSS perceived income rankings and Sixth Form perceived income rankings = 0.9305

One can conclude from this analysis that the curricular changes that have sought to divert students' attention away from white-collar jobs in favour of blue-collar jobs have so far had no impact. The ideas held by students of the new educational system about prestige and incomes associated with some jobs that Ghanaians have are generally not different from ideas concerning the same issues held by students of the former system.

5.4.12.8: Student Opinions on self-employment

The data of the present study suggest that students of the new educational system, like students of the former system, are looking up to the Government for jobs.

Table 5.35 describes the preferred prospective employers of both SSS and Sixth Form students.

5.35: STUDENT PREFERRED PROSPECTIVE EMPLOYER

	PREFERRED PROSPECTIVE EMPLOYER			
STUDENT TYPE	SELF	GOV:T	SOME ONE ELSE	TOTAL
SSS (NEW SYSTEM)	27 (7.1 %)	252 (66.5 %)	0 (0.0 %)	279 (73.6 %)
SIXTH FORM (OLD SYSTEM)	33 (8.7 %)	62 (16.4 %)	5 (1.3 %)	100 (26.4 %)
TOTAL	60 (15.8 %)	314 (82.9 %)	5 (1.3 %)	379 (100 %)

Of the 379 SSS and Sixth Form students who responded, 82.9 per cent preferred employment in the public sector to self-employment (15.8 per cent) or to employment by some one else (1.3 per cent). In relative terms, 90.3 percent of SSS students as against 62 per cent of Sixth Form students expect to be employed by the Government.

When the preferred employers are reduced to the two categories Non-Government and Government, the following picture emerges.

TABLE 5.35 (a) STUDENTS: PREFERRED PROSPECTIVE EMPLOYER

PROSPECTIVE EMPLOYER	SSS	SIXTH FORM	TOTAL
NON-GOVERNMENT EMPLOYMENT	27	38	65
GOVERNMENT EMPLOYMENT	252	62	314
TOTAL	279	100	379

$\chi^2 = 41.5591$, df = 1, significant at the 0.05 level.

The proportion of SSS students wanting non-Government employment is 9.7 percent while the proportion of Sixth Form students wanting non-Government employment is 38 per cent. This association between the type of educational system the student passed through and his / her preferred employer can be shown

to be significant at the 0.05 level on a chi square test (χ^2 = 41.5591, df = 1, p < 0.05). Therefore the data suggest that the type of system that a student passed through is not independent of the type of employer preferred. In this case the students of the former system among the sample appear to be more likely to opt for employment outside the public sector than students of the new system. This could be because the sixth formers are older and are much more aware of the employment problems in the public sector. That said, the finding further illuminates the mismatch between curricular intentions and reality. The innovations of the new system have not yet succeeded in motivating students to look forward to private sector employment.

5.4.12.9 Student Attitudes to Working and Living in Rural Areas

Rural-urban migration has been a problem in Ghana since the 1970s. The present content of education seeks to encourage school leavers to remain and work in the rural areas where 68 per cent of the population live (Statistical Service, 1993). In this regard, the opinions of students concerning working and living in rural areas were sought by asking them to indicate whether they would prefer to work in a city, a town, or a village, or anywhere.

Table 5.36 shows where students would want to work and live. Of the 378 students who responded, 38.1 per cent preferred to work and live in a city, 18.8 per cent preferred a town, 15.6 per cent preferred a village while 27.5 per cent were indifferent. In terms of the type of educational system they passed through.

the data show that of those who desired to work and live in a city, 28.6 per cent were SSS students. Also of those wishing to reside in a town 18.0 per cent were SSS students while 11.8 percent of SSS students were among those wishing to live in a village. Moreover, the proportions of those who were indifferent as to where to work and live were 18.5 per cent of SSS and 9 per cent of Sixth Form students.

TABLE 5.36 (a): STUDENT PREFERENCES CONCERNING WHERE TO WORK AND LIVE

STUDENT TYPE	CITY	TOWN	VILLAGE	ANYWHERE	TOTAL
SSS	108 (28.6 %)	49 (13.0%)	52 (13.8%)	70 (18.5 %)	279 (73.9%)
SIXTH FORM	36 (9.5 %)	22 (5.8 %)	7 (1.9 %)	34 (9.0 %)	99 (26.2 %)
TOTAL	144 (38.1%)	71 (18.9%	59 (15.6 %)	104 (27.5%)	378 (100.1%)

Differences between the attitudes of the two categories of students about the urban and rural areas were tested. To facilitate this, those who were indifferent were eliminated and the remaining responses were reorganised by merging the city and town preferences and calling the new group 'urban', while labelling the village preferences 'rural' [Table 3.36(b)]

TABLE 5.36(b):STUDENT PREFERENCES CONCERNING WHERE TO LIVE AND WORK

	SSS	SIXTH FORM	
URBAN	157	58	215
RURAL	52	7	59
	209	65	274

The proportion of SSS students who prefer an urban setting is 75.1 per cent and the proportion of sixth formers who prefer an urban setting is 89.1 per cent. It can be shown that these proportions are significant at the 0.05 level on a chi square test ($\chi^2 = 5.8431$, df = 1, $p < 0.05$). The data appear to suggest that students of

the former system (sixth formers) are more inclined to want to work and live in an urban area.

Fifty-eight sixth formers and 140 SSS students who categorically preferred living in urban areas as well as 40 sixth formers and 49 SSS students who definitely preferred working and living in rural areas gave the following reasons for their preferences (Table 5.37).

TABLE 5.37 STUDENTS' REASONS FOR THEIR URBAN OR RURAL PREFERENCES

REASONS FOR CHOICE OF URBAN AREA	SIXTH FORM (f)	SSS (f)	REASONS FOR CHOICE OF RURAL AREA	SIXTH FORM (f)	SSS (f)
To enjoy social amenities	50	96	To go into farming	1	8
To study while working	1	27	To help rural dwellers	15	36
To get more experience	1	6	To have experience about rural problems and how to adjust to situations	20	1
To be near my parents	1	8	It is cheaper to live there	4	3
To leave my parents	1	0	To be near my parents		1
To be civilised	4	3			
TOTAL	58	140	TOTAL	40	49

Table 5.37 shows that the students have a warped knowledge about conditions in the urban areas. What is clear, however, is that unless and until conditions in the rural areas improve considerably, the youth will continue to consider urban life more attractive, though the opportunities that the students think abound in the urban areas are not necessarily there. Having said that, it needs to be pointed out that the students are not altogether oblivious of the role they can play to improve conditions in the rural areas. Fifteen of the 40 (37.5 per cent) of sixth formers and 36 0f the 49 (73.5 per cent) of SSS students willing to settle in rural areas want to do so because they want to help the rural dwellers. On the whole the data underscore the need to intensify not only career guidance, but also to provide up-

to-date information about the prospects and problems of both urban and rural areas.

5.5 Discussion of Results

The thesis of this work has been that Ghana's educational reform programme has no prospects of success and, therefore, a potential to facilitate national development unless the changes in structure and content of the educational system are accompanied by attitudinal changes on the part of stakeholders. Central to these attitudinal changes are the stakeholders' clear understanding of the objectives and nature of the reforms , their commitment to the reform process and their active participation and co-operation at all levels of the reform process.

The foregoing analysis shows that there is no consensus among stakeholders regarding the objectives of the 1987 educational reform programme which reflects a lack of understanding of the major objectives of the reform. This lack of clear understanding of the objectives stemmed from the exclusion of important sections of stakeholders, notably teachers, from participating in the development of the innovations associated with the reform. This lack of understanding of the objectives have favoured the emergence of incongruities both in the implementation of the programme at the grassroots level and in assessing the outcomes of the various aspects of the programme (cf. Nwakoby with Lewin. 1991: Adamu. 1991; Sinclair. 1977).

The analysis further shows that the strategy of implementation adopted - implementing the programme and then attempting to solve the problems that arise later - created much confusion. Although the strategy had some merit in that it gave officials who might wish to oppose the reform programme no room to manoeuvre (see Bennett, 1993), its demerits have been considerable. Because of the rush in implementing the programme, no infrastructure were put in place; the central ideas of the innovations were not effectively sold to the stakeholders; teachers were not adequately prepared to make them feel comfortable with the changes; curricular materials were hurriedly produced and were not piloted before being put into regular use.

Consequently, the case studies of the present study reveal the following aspects of the school system which show no departure from the former system:

1. an incongruence between the new school system in general, and most of the curriculum materials in particular, and the students' background;
2. lack of integration across the various disciplines;
3. unstimulating teaching methods, basically centred around lecturing and note dictation or lower order question and answer, which only lead to learning by rote and failure to acquire in-depth understanding;
4. muddled or unmotivated teachers;
5. lack of confidence about the potential of students; and
6. lack of integration of the schools into the life of the community.

The incongruence between the school curriculum and students' background is a problem that other developing countries have encountered during their educational reform programmes. The problem has been identified in Nigeria (Nwakoby with Lewin, 1991), in Zimbabwe (Graham-Brown, 1991), Brazil (Leonardos, 1993), China (Yat-ming, 1991), Papua New Guinea (Thomas, 1976) and Malaysia (Lewin, 1990). The central cause in all of these cases has been that the curriculum is geared to a very academic style of learning and favours only a small proportion of the students aspiring to higher education. In the Ghanaian case an immediate result of the incongruence between curriculum content and reality was a mass failure of the first batch of the SSS students in their final examinations. The disparity between curriculum content and student ability was complicated by a relaxation of the selection procedures for entry to SSS and the duration of the SSS course was fixed at three years while syllabuses were just as long or longer than the those of the former system. Then in the name of 'maintaining standards' the West African Examinations Council set questions that assumed a full coverage of syllabuses, and students' ability to communicate effectively in English. These assumptions were not only unrealistic with reference to the case-study schools but also grossly unrealistic even with reference to some of the well-established schools across the length and breadth of the country.

In the literature, there are numerous instances of opposition to the operation of parallel curricula, even when the move is supposed to make education more meaningful to particular localities. Every parent wants their child to pursue a

"mainstream curriculum" in order be competitive in accessing the prestigious occupations. In India, this problem occurred with the introduction of the Ghandian reforms and eventually rendered the reforms ineffective (Sinclair, 1977). Thus, in the Ghanaian case, the introduction of vocational courses in the senior secondary schools alongside general arts and science courses was done without being unaware of the potential opposition from parents looking forward to seeing their children go through university education. Needless to say, some parents resisted their children being streamed into vocational programmes, though some Headmasters believe that with time such parents would change their attitudes. But the major problem is that the vocational students feel that university education is their ultimate. So there was hue and cry when some universities intimated that they could not offer direct admission to SSS students in the elective agricultural science stream because their course did not include an adequate background study of the basic sciences. The implications for these are two-fold: first, only mediocre students will opt for the vocational stream (including agriculture) and second, those who initially fail to enter the general Arts, Science or Business streams will rather remain unemployed till they acquire the relevant requirements that would get them into these areas.

The analysis points to poor curriculum design and poor pedagogy as being at the core of the problem of making the educational reform focus on community development. Curriculum goals are not specific. Pre-university curricula at all levels have diffuse educational objectives. Thus, there are no clear objectives as to

what outcomes to expect at each stage of the primary JSS and SSS courses. Moreover, it is evident from the data of the present study that the JSS and SSS curricula lack cohesiveness: knowledge within each subject matter area is fragmented and students have no chance to make connections even between different sub-areas.

The resolution of these problems is not easy, not only because of the inadequate preparation that teachers were given prior to the nationwide implementation of the reforms but also because of the nature of teacher education in Ghana. Teacher education in Ghana has always concentrated on "how to teach" to the neglect of "what to teach". This tendency has also been observed in other developing countries (see, for e.g., Saraiva, 1984, cited in Leonardos, 1993: 71). In Ghana what to teach has always been decided by the central education authority. Thus, not much can be expected of the average classroom teacher to adapt the curriculum to the local students' environment and their needs.

The foregoing analysis also reveals that a large proportion of the teachers who participated in the present study hold negative views about the students of the new educational system. Da Silva (1984) refers to evidence that teachers' views and attitudes differ according to the students' background (see Leonardos, 1993: 72). The present study has found similar evidence. The small proportion of teachers who expressed positive views about their SSS students were those employed in schools where majority of the students come from upper-class homes

while the majority of teachers who were critical of their SSS students were dealing with the children of the masses. The negative views about the students are regrettable because they tend to make teachers blind to the strengths of the students in areas other than purely academic, literary or technical skills. This defeats the principle that under the educational reform programme there is no failed student.

A last area of concern revealed by the analysis is the role of the community in school affairs. Government has been able to shift a large measure of the responsibility for providing schooling to parents and communities. Within reason, parents have shouldered and are prepared to shoulder this responsibility because demand for schooling is high. In many cases it is the communities which provide school buildings while the Government assists with roofing materials or pavilions and supplies text books and essential equipment, and provides teachers as well. Such a strategy tends to widen disparities in the provision of schooling rather than eliminate them (see Graham-Brown, 1991 for examples from Zambia and Zimbabwe). In the Ghanaian case, the upper classes who often dominate PTA meetings, especially in the urban areas have seized the opportunity to impose excessive levies termed "building funds" in order to provide workshops and classrooms for their children's schools. Poor parents who cannot afford the high fees levied feel intimidated and some have had to withdraw their children from such schools. One student who passed through the former system tried to justify

why his system was better than the present system by alluding to this problem. among others. as follows:

> My system of education brings competition in the academic field and makes us to learn more in order not to be last. But the continuous assessment brings no competition in the academic field. We were thought (sic) to be discipline (sic) and respectful, academically sound and lastly the educational standard was higher than the present system (sic). Finally ***the cost of education was lower and affordable comparing (sic) to the present system (sic) everything is provided by the parents and in addition parents paying dues through PTA which in fact causes many parents to redraw (sic) their wards from the education system***... (emphasis mine).

This student's comments not only reinforce the prejudices that teachers have about the students of the new educational system but also highlight the problems that parents face as a result of the reform.

It is simplistic to assume that when parents share the cost of providing education Government will have more funds for helping disadvantaged communities. This is not necessarily the case. In Ghana what this succeeds in doing is to widen the gap between schools which are traditionally richly endowed and those whose students have no wealthy PTAs or Old Students Associations. The fact is that mentors of the established schools, mostly in the cities and big towns, are also those who can stand up to Government to demand development funds. In a fragile democracy, such as exists in Ghana, it is politically inexpedient for a government to deny funds to affluent schools in order to spend it where it is most needed without having its good intentions twisted by vociferous , aggrieved upper class parents with consequent loss of political points. Thus, the better endowed schools continue

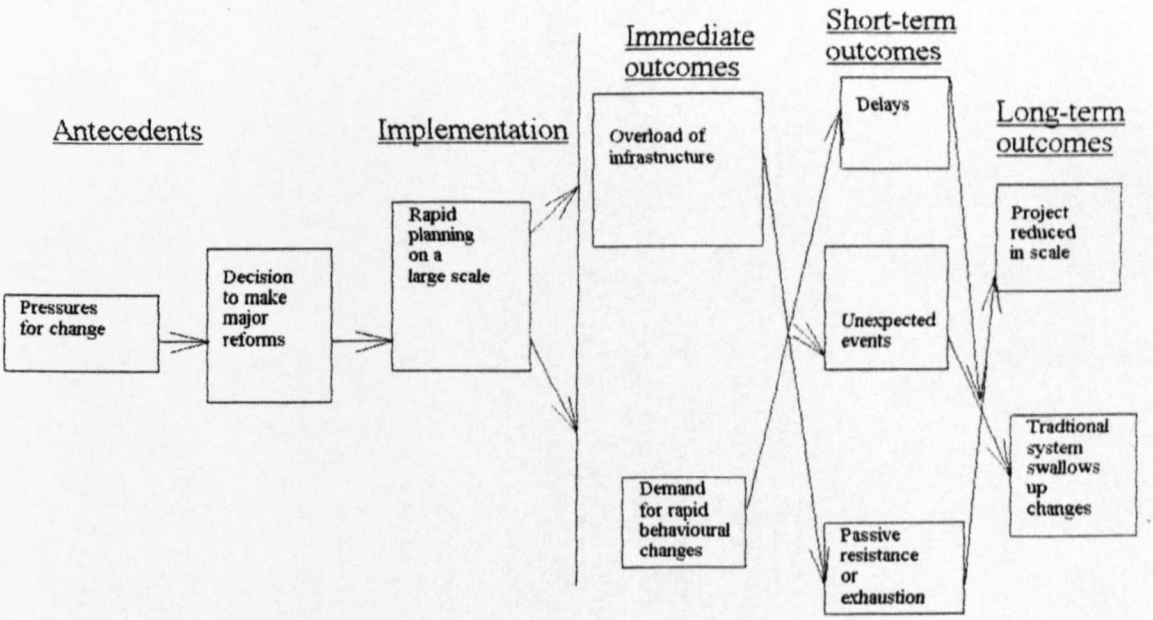
to have better facilities while the poorer schools become worse off. The plight of rural schools is worsened by the fact that the high levies exacted by the town PTAs have made it impossible for people with rural origins who work in the urban areas to pay such levies to keep their own children in good schools and at the same time contribute towards the development of the schools in their villages.

The implications for the above analysis are, first, that curriculum intentions will continue to differ from reality in the majority of schools unless Government musters courage to provide funding on a means tested basis. Secondly, unless the monopoly of the middle classes and elite groups over governmental resources for education is effectively broken, the broad-based, skill-oriented education envisaged may sooner than later revert to the former system which heavily focused on white-collar jobs, since the elite schools are only interested in preparing students for the prestigious professions.

Overall, Ghana's ongoing educational reform programme suffers the pitfalls experienced by other developing countries. What appears to be unique in the Ghanaian case is the whole system overhaul that the reform sought to achieve: both changes in structure and content at the same time, without necessary infrastructure. The risks of such a strategy were pointed out by Havelock and Huberman (1977) who labelled such a strategy "a problematic pattern of implementation and outcomes of innovative projects", illustrated by Figure 5.2.

The results of the present study suggest that the Ghanaian reform fits this model. The immediate outcomes of the rapid planning and execution of the educational reform programme on a national scale have been an overload of existing infrastructure and an urgent demand for behavioural change on the part of stakeholders.

FIGURE 5.2: PROBLEMATIC PATTERN OF IMPLEMENTATION AND OUTCOMES OF INNOVATIVE PROJECTS



Source: Havelock, R.G. and A.M. Huberman (1977) Solving Educational Problems , Paris: Unesco, p.73

The overload of infrastructure has resulted in exhaustion on the part of parents of communities with regard to the financial contributions expected from them and on the part of teachers with regard to increased work-loads. While stakeholders' problems remain unresolved, mass failure of SSS students in their final examinations have begun to threaten the basic foundation of the entire reform programme so that either the scale of the reform programme will have to be

reduced or traditional structures will eventually swallow up the changes (Fig. 5.2).

The overload on the system has been complicated by the contentious nature of the curricular innovations which are subject to different interpretations because stakeholders did not clearly understand the objectives of the reform from the onset. These are pitfalls that have been observed in other developing countries such as Nigeria and China (see, Nwakoby, 1991 ; and Yat-ming, 1991, respectively).

Ghana's educational reform is also hindered by over-centralisation arising from over-reliance on the charisma of individuals and excessive bureaucracy and power-coercive approaches by Ministers . Similar problems have been reported in India under Mahatma Ghandi (Sinclair, 1977), China under Mao Xiaoping (Yat-ming, 1991), and Tanzania under Nyerere. Such approaches do not encourage initiative . Associated with such over-centralisation and use of power-coercive strategies is what some writers have termed the "change without change syndrome", a condition that has been recognised in China and other countries (Lewin, 1981; Crossley, 1984; Morris, 1985; Guthrie, 1986). In China this condition was illustrated when after 1976 there was a "whole country learn English" campaign by which all children were expected to learn English. However, this was not practicable in most schools because there were no qualified teachers (Yat-ming, 1991). The parallel in Ghana is that under the current reform.

practical vocational and technical skills are expected to be taught to all JSS students. But this is not being done because of lack of qualified teachers, work shops and equipment.

The Ghanaian reforms have not also drawn from good aspects of past reforms in other developing countries nor in developed counties. Examples are the provision of compensatory schemes for disadvantaged students by India (Taylor, 1991) and Malaysia (Spaulding, 1988) and Japan (Cummings, 1982). Such compensatory schemes promote equity and also reduce waste. The Ghanaian system also lacks an effective way of streaming students into technico-vocational and general Arts and Science streams as practised in Malaysia (Wilson, 1991) and in Cuba (Cowen and McLean, 1980). Cumulative records are not effectively used.

Finally, Ghana's educational reform has neglected systems, problem-solving and scientific approaches which characterised the success stories of the Japanese and Swedes. In Japan and in Sweden bureaucracy was used purposefully to provide legitimacy to the authority needed to ensure that everyone focused on the matter on hand, not as an end in itself.

5.6 Summary and Conclusions

5.6.1 Summary of Research Findings

The analysis of the data of the present study has revealed that Ghana's 1987 educational reform programme is fraught with the pitfalls suffered by other

developing countries in their educational reform efforts. Also, the reform in Ghana has not adopted and adapted any of the good practices of other developing countries nor developed counties. Specific findings of the research in relation to the research questions are summarised below.

1. Structural and curricular innovations were adopted and implemented with the intention of making education better able to equip school leavers with skills in agriculture, science and technology to help tackle the bottlenecks in agriculture, which is the core of Ghana's economy.

2. No specific model of curriculum design was used although some elements of Skilbeck's 'situational' model, notably situational analysis, were evident. Curriculum materials were produced by a central body organised in subject groups under the supervision of the Ministry of Education. The materials - syllabuses and text books - were put into use without trials.

3. The major factor that influenced various stakeholders during the innovation process which culminated in the present structure and content of education was the desire to implement recommendations of the IMF / World Bank which cut across all sectors of the economy, including education. In particular, there was pressure on Government to eliminate waste by reducing the time spent in school and prohibiting grade repetition . These measures were expected to make money available to create more places for children of school-going age. The desire to cut down on the public wage bill also increased the concern to provide a skill-oriented curriculum that would help school leavers seek

employment in the private sector or employ themselves within their communities.

4. In the case-study schools, the new JSS and SSS curricula are generally transacted in a manner inconsistent with the objectives of the reform programme. There is little two-way communication in classrooms. Pedagogy is centred around solitary drills at the JSS level; and at the SSS level, teaching methods hardly deviate from lecturing and note dictation with no accommodation for different learning styles.

5. There are mismatches between curriculum intentions held by the curriculum innovators and the actual implementation of the JSS and SSS programmes. Among the factors responsible for these mismatches are:

   (i) lack of workshops and inadequate supply of tools and materials for or vocational and technical subjects;
   (ii) lack of qualified vocational and technical subjects;
   inappropriate method of assessing vocational and technical skills;
   (iii) lack of vocational career inducements, especially with regard to the ease with which practical skills being offered by the schools can yield cash returns;
   (iv) unrealistic assumptions made by innovators regarding the abilities of the JSS and SSS students and the ability of the teachers to handle the new curriculum materials.
   (v) unrealistic assumptions made by the innovators regarding the time required to cover the syllabuses. The data of the present study appear to suggest that the 3-year duration for the SSS course is unrealistic.

6. Over 30 per cent of JSS students in the case- study schools passed through the entire JSS course without learning any practical skill. Skills commonly learnt

at this level include the weaving of doormats, simple needlework, mending of clothes and sewing of children's clothes. Others are simple cookery skills such as preparation of local dishes, pancake and doughnuts.

7. Parents' perceptions of the new educational system show some ambivalence. While 43 per cent of the students in the case -study schools believed that their parents like the new system because it provides opportunities for students to acquire useful practical skills, another 41 per cent of the students claimed that their parents hate the new system because it imposes too much burden on children ; the children have to study too many subjects, and as a result educational standards are falling. Teachers saw the new system as fraught with problems which could have been avoided with better planning and implementation. Majority (79 per cent) of students under the old system in the case-study schools felt the present system of education is inferior to the former one while 17 per cent felt the new system is better because it has opportunities for preparing the youth for work, thus easing the pressure to go on to university. On the other hand, JSS and SSS students generally like their system of education, except for the many subjects that they have to study. Overall, all stakeholders appear to have accepted the programme in principle and believe that if the immediate problems are solved, the system has a future and should facilitate national development.

8. Across all categories into which SSS students have been streamed, the popular subjects among the students are the traditional subjects. Paradoxically,

examination data show that English Language is one of the students' weakest subjects; yet it is reported as the favourite of 67 per cent of SSS students.

9. JSS and SSS students in the case-study schools, like students under the former educational system, aspire to prestigious occupations. However, the students under the former system (sixth formers) appear to be more aware of the actual occupations open to them at various levels of educational attainment. Some SSS students think they can access some of the professional jobs without going beyond the SSS. With regard to the choice of prospective employer, 90 percent of students of the reform programme (SSS students) wish to be employed by the Government as against 62 per cent of students of the old educational system (Sixth Form students). Also, 10 per cent of SSS students as against 38 per cent of Sixth Form students contemplate self-employment. No SSS student wants to work for a private employer while 5 per cent of sixth formers would do so. moreover, 56 per cent of SSS students compared to 59 per cent of Sixth Form students prefer living and working in urban areas; 19 per cent of SSS students as against 7 per cent of Sixth Form students would like to live and work in villages, while 25 per cent of SSS and 34 per cent of sixth formers would go wherever jobs are available. Furthermore, both students of the new system and those of the former system treasure higher education and the acquisition of certificates: 99 per cent of SSS students in the case-study schools and 100 per cent of sixth formers desire to proceed to higher education programmes. Overall, therefore, students of the former educational system hold views similar to students of the reformed system with regard to such matters as occupational

choice , living and working in rural or urban areas and the desire for higher education. However, students of the reformed system appear to be less interested in seeking private sector employment

10. The data from the case-study schools suggest that 'dropouts' at the JSS level are "roaming the streets".

11. Enrolment in primary schools increased by 10 per cent following the implementation of the educational reform programme. However, the present study found no evidence that this increase was attributable to the implementation of the reform. Rather, the data suggest that the primary schools suffered neglect while all attention was directed at putting the new JSS system in place.

12. School activities remain unintegrated with the activities of the community in which they are situated. a practical example of this lack of integration is the teaching of vocational skills not relevant to the needs of the community.

5.6.2 Conclusions

A number of conclusions can be drawn from the above findings. The first concerns the rationale of the reforms. The results of this study show that while stakeholders accept the reforms in principle, they do not like the strategy of implementation. At the heart of that complaint is what Lewin and Stuart (1991) call the planner's paradox: the stakeholders want innovation; but they are not prepared to accept the problems associated with this innovation, especially where the solutions to the emerging problems require attitudinal and behavioural

changes on the part of stakeholders. Stakeholders are more likely to accede to such attitudinal and behavioural changes only if they clearly understand the objectives of the innovations and are committed to the innovation process. Upon these premises, one can draw the conclusion that educational reformers are bound to resort to fire fighting in order to sustain the reform where stakeholders have no clear understanding of the reform goals and they problems to expect. A clear understanding of the reform goals and the attendant problems will give stakeholders the opportunity to make informed decisions as to how to cope with the problems when they do occur. Otherwise, stakeholders will begin to lose faith in the reform programme , as the Ghanaian experience has shown. A corollary to this conclusion is that political authority is necessary but not sufficient to ensure the success of an educational reform; stakeholders play a crucial role and must therefore not be taken for granted , as in the Ghanaian case, at any stage of the reform process.

Second, an educational reform initiated way up the system truncates the system, causing neglect at the bottom stratum. In the Ghanaian case, the reform was initiated at the JSS level, with the primary schools largely neglected. Consequently, students received into the JSS from the primary schools are ill-prepared and thus unable to cope with work at the SSS level. This has lowered stakeholders' confidence in the system.

Third, there is little point in investing in vocational education where the educand and his parents are not interested. Therefore there is the need to identify, through inter-sectoral and community planning and consultation, what skills are required so that vocational and technical instruction will be geared towards producing people with appropriate skills to be shepherded into these jobs.

Fourth, no amount of curricular changes can stop students or their parents from fantasising about white-collar jobs in the urban areas unless the innovation provides for actual work-experience in the countryside as a normal part of the school curriculum. The experiences of Cuba and Papua New Guinea appear to suggest that this is a worthwhile endeavour.

Fifth, the present Ghanaian school curriculum is still weighted in favour of those aspiring for more education. Unless this is rectified, the pursuit of more education by more people will further aggravate the educands' demand for high status occupations while those unable to access higher education will remain insufficiently prepared to avail themselves of the opportunities that the economies of the local communities may provide.

Finally, the way forward in picking up the pieces after the false start of the 1987 educational reform programme seems to consist in :

1. devolving more power to stakeholders at the grassroots to shape the curriculum to suit their needs;

2. reviewing the curriculum to accommodate the needs of those for whom JSS and SSS are terminal:

3. overhauling the examination system to shift emphasis from knowledge and recall to productive work, attitude and skill development, and problem-solving: and

4. improving the communication network between the education authorities, teachers, students, employers and parents to facilitate the dissemination of development goals and the role the reform can play in that regard and, thus, create the environment for attitudinal changes in favour of relevance education.

The appointment by the government of an Implementation Review Committee suggests that the government is prepared to listen to stakeholders and with the Committees help measures such as the above may be taken to improve the prospects of the educational reform programme and its potential as a development strategy.

CHAPTER 6

POLICY IMPLICATIONS AND THEORETICAL PERSPECTIVES

6.1 Overview

The previous chapter showed that although Ghana's new education system is in place largely because of the Government's ability to mobilise political will, the prospects of the new system are fragile because stakeholders have not clearly understood the objectives of the various aspects of the reform programme and are therefore still thinking in terms of the old system of education.

The present chapter discusses the prospects and potential of current Ghanaian education for development. An alternative model for initiating, developing and implementing an educational reform programme is suggested to show how some of the problems inherent in the present programme could be avoided or rectified.

This chapter also assesses the overall importance of the present study and the implications that the results have for educational policy in Ghana and educational theory as well. The chapter concludes with suggestions for further research.

6.2 Prospects and Potential of Ghanaian Education for Development

The results of the fieldwork reported in Chapter 5 revealed a number of factors that threaten the prospects of the ongoing educational reform programme. These include: a lack of in-depth understanding of the objectives of the reform; shortage of teachers, materials and workshops for vocational and technical courses;

inefficient monitoring and evaluation procedures; mismatches between curricular intentions and actual implementation in the schools; articulation problems between JSS and SSS and SSS and university as well; over-centralisation of decision-making concerning the reforms; increased financial burden of parents; and no attitudinal changes on the part of teachers, students, and parents consistent with the goals of the new system.

Against these threats, however, is the consoling revelation that the new system is accepted in principle and there is no basis to suggest that a change of government will lead to the new system being completely abandoned, as happened in the case of past reforms. For example, in 1966, following the overthrow of Nkrumah's CPP Government, the new rulers reversed a decision that had been taken in 1963 to reduce the secondary school course from 5 years to 4 years during which time students would sit for the School Certificate Examination. Like the present strategy being employed to implement the current educational reform programme, the 1963 decision and its implementation had been handled in a top-down manner, without opportunities to accommodate ideas that would make the transition efficient. Unlike the 1963 reform, however, the present chances for the continuation of the present reforms have been improved by a shift in the government's authoritarian position. Stakeholders have been given a chance to point out the aspects of the reforms that are undesirable or unworkable so that steps will be taken to make necessary changes.

The government demonstrated its preparedness to listen to the professionals and other stakeholders by appointing an Educational Reform Review Committee charged with the responsibility of ensuring linkages between the JSS and SSS and offering advice on other issues. At the time of the fieldwork, the committee had invited memoranda from stakeholders and initiated a debate in the Press to collate opinions that would help it propose amendments to the reform programme (see, for e.g., ***Weekly Spectator***, September 24, 1994, p. 9).

Data from interviews involving GNAT officials and Headmasters seemed to suggest that stakeholders were confident the Committee would convince the government to review the duration of the SSS course and the cluster of subjects under the different programmes; to provide necessary inputs at the right time; and to give Headmasters greater autonomy in deciding what programmes to offer. Thus this new development has enhanced the prospects of the reform programme.

Also, the prospects of the reform are helped by the fact that the majority of Ghanaian parents are prepared to make reasonable sacrifices to ensure that their children receive what they consider to be worthwhile education. So if the new initiatives can convince parents that they are making a good investment, they will be willing to continue to shoulder their part of the burden of funding education.

Articulation problems related to the transition between SSS and tertiary (especially university) education has also been given attention with the

appointment by the Universities of an Inter-University Committee for SSS admissions. This Committee is important for two reasons: First, the universities are now directly involved in making known to students, teachers, parents and the general public what opportunities are open to SSS students who desire and qualify for university education. Secondly, the confusion that arose regarding the qualifications which agricultural science students need to be eligible for admission to university courses would no longer arise. This confusion had greatly undermined parents' confidence in the new educational system.

Furthermore, a twenty-four member Committee was appointed, to implement a remedial programme for the 'failed' students of the 1993 session to help them get better grades. Elsewhere in the present work, the rationale behind establishing this Committee - to help organise remedial classes that would enable failed students qualify for university entrance - was criticised because it gave a negative message about other aspects of the reform programme, such as the possession of vocational and technical skills. However, the good aspect of that move is the opportunity it provided for a broad spectrum of stakeholders (including the MOE, GES, GNAT, NUGS, WAEC, and the National Service Secretariat) to brainstorm and provide solutions to problems arising from the implementation of the reform programme.

The establishment of these Committees means that structures now exist to facilitate the devolution of power so that the negative effects due to over-centralisation which is characterised by bureaucratic red tape and coercion would

eventually give way to a systems approach that would encourage partnership in the delivery of relevance education.

More remains to be done to sell the objectives of the reforms to stakeholders, many of whom still associate educational success with success in the external school leaving examinations and qualifications for university education and white-collar jobs. However, it is gratifying that Heads of the case-study schools admitted that what really makes the difference between the present and the former system is the vocational aspect of the curriculum. The Heads noted that students of the vocational course could produce items of commercial value. Unfortunately, cash-strapped schools are unable to provide materials required to give students the actual experience that would reinforce their skills. Besides, many parents still think that the vocational courses are watered-down options that would not benefit their children, especially with regard to gaining access to the professions. But if the vocational courses are made more related to what the communities want and students can directly sell their skills, attitudes towards such courses will change.

Overall, the prospects of the reforms at the moment are fragile largely because of the false start. The initial errors are expensive to correct. Their correction means the application of resources which could have been used to improve access at the primary level and provide materials for the vocational courses. On the other hand, the acceptance of the rationale for the reform at the tertiary level provides some hope that the new system will continue while amendments are continually made to

make it more appropriate. An important measure in this regard is the introduction of distance education which would encourage school leavers in employment to remain on their jobs and yet be able to access specific courses that would improve their efficiency.

The basic idea behind the reform also has potential for rural development, which is the key to Ghana's overall development. The bottleneck , however, is how to whip up interest in rural economic activities. The present study has shown that making certain subjects compulsory is not a solution. The solution appears to consist in persuading teachers to change their attitudes and help introduce skills that are actually needed by the communities and also in providing access funds to enable school leavers set up small-scale enterprises.

The case-studies have also suggested that Ghanaian youth will settle for occupations that promise immediate financial rewards. That is why children cut classes to go and polish shoes or drop out of school to cart goods in local markets or sell dog chains in urban centres. Therefore the actual potential of the reform as a development strategy lies in the ability of the government to create appropriate quasi-governmental agencies that will assist young people to market the skills they are taught. This demands massive investment in rural development projects in construction, agriculture and health care to increase the range of skills needed in the communities. Inter-sectoral planning and collaboration as well as the creation of a data base are essential to facilitate the initiation of such development

projects. The reform model in use at the moment requires considerable modification to be able to deliver education along the lines outlined.

The next section presents an alternative model that could address both the problems of implementation and attitudinal change so that the chances of success may be enhanced.

6.3 An Alternative Model of Educational Reform for Development - A Proactive Model of Educational Innovation

Figure 6.1 shows a model of educational innovation that would reduce the fire-fighting that has characterised Ghana's 1987 educational reform programme. The general model consists of eight stages: needs assessment; initiation and formulation of objectives, policy formulation; strategic planning, curriculum development and dissemination of curricular objectives goals of the innovation; try-out of curriculum materials; full-scale implementation at national level; school level implementation; and monitoring, assessment and evaluation.

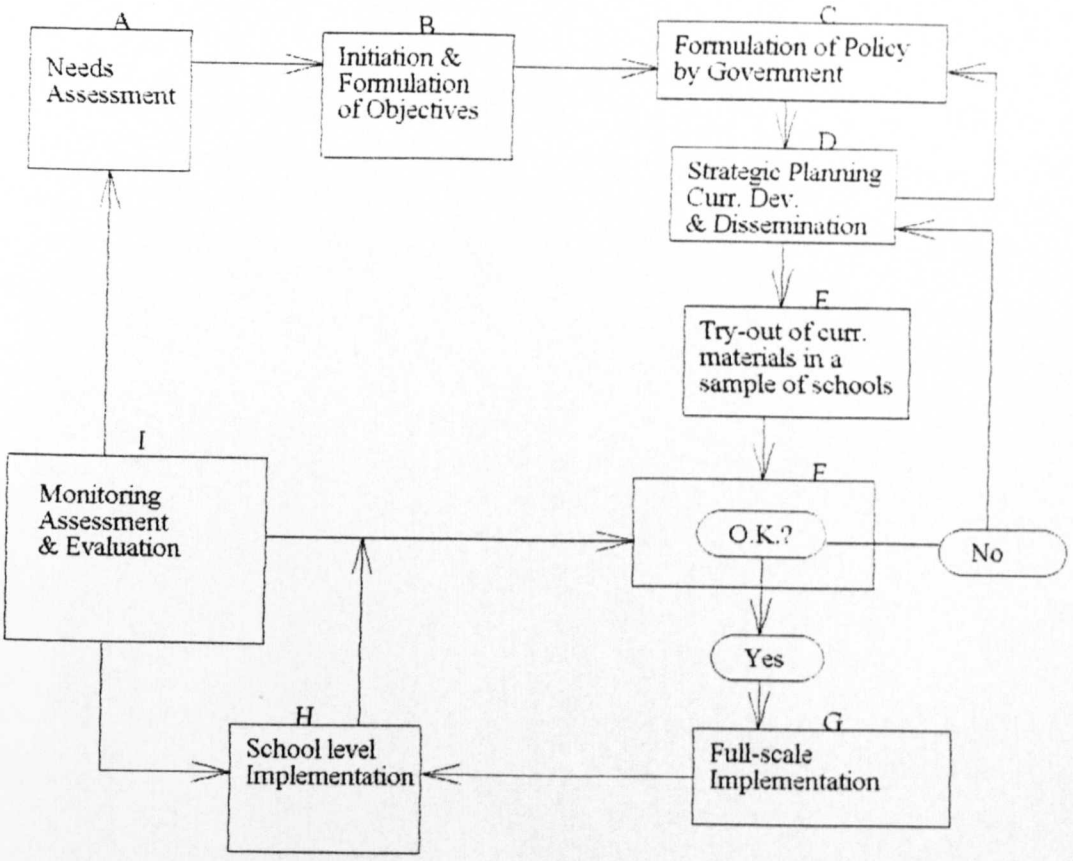
The model demands a combination of systems, bureaucratic and scientific approaches to innovations (Lewin, 1991). All shades of opinion are gathered during the needs assessment process and the initiation and formulation of the objectives of the innovative programme are undertaken by a wide spectrum of stakeholders. Educational policy outlining the innovations that constitute the reform is formulated upon advice from education professionals. Thus, from the very beginning, steps are taken to ensure that adequate brainstorming by

knowledgeable groups provide ideas that would forestall common pitfalls associated with the planning of innovative programmes.

Once the policy has been enunciated, there are sensors that will detect troubleshooting very early so that alternatives already decided in advance are applied. A data processing unit is crucial here. Dearth of information in simple usable form is one of the main problems that hinder the effective planning and delivery of education in Ghana. A data processing unit with branch offices in all districts and regions will provide information about the status of the reforms at each stage so that appropriate decisions can be made regarding what steps to take next. For example, a full-scale implementation will be undertaken only when the experimental phase has been satisfactory. The data processing unit provides an effective link between implementation at the national level and at the school level and feeds the government with information about what is happening so that there is little room for trouble to escalate and, thus, call for fire-fighting.

The strengths of the Proactive Model lie in the opportunity it provides to reach consensus. Thus, chances are that everyone will be clear as to what is expected of them and thus facilitate the institution of measures that would assure attitudinal changes to meet the objectives of the reforms. As Figure 6.1 shows, monitoring is not just left to officials of the GES or the MOE; other sectors of the economy and independent researchers are involved. This will help direct the course of the reform towards the needs of the society and general national development goals.

FIGURE 6.1: PROACTIVE MODEL OF EDUCATIONAL REFORM



THE ACTORS

STAGE A

PTAs
Teachers
GES Officials
District Assemblies
Mission Ed. Units
Local Businessmen

STAGE B

MOE & GES
GNAT
CHASS
PRINCIPALS CONF
PRIVATE SCHs ASSOC
NUGS
CHAMBER OF COMMERCE
NATIONAL DEV COMM

STAGE C

GOVERNMENT
with advice from:
GES, GNAT, UNIVERSITIES

STAGE D

CRRD & GNAT
Contract Authors
Mass Media

STAGE E

CRRD
WAEC
Selected schools from:
rural, urban, municipal areas and cities.

STAGE F

Data Processing Unit composed of
District, Regional & Headquarters officials of GES

STAGE G

Implementation Committees
at District, Regional and National levels
composed of GES officials, GNAT officials
Teachers, rep. from District Assembly & PTAs

STAGE H

All schools
Sch Implementation Committees

STAGE I

Inspectors
Supervisors
Researchers
Inter-sectoral - liaison committee
WAEC

6.4 Overall Importance of the Study

The importance of the present study may be put under four headings:

1. the identification of problems of the reform from the point of view of an independent and impartial observer, and how these problems are related to the problems of educational reforms in other developing countries, which may help the Ghanaian education authorities to initiate measures to put the reform on course;
2. the identification of unexpected consequences of the reform which may inform educational policy ;
3. contributions to educational policy-making;
4. contribution to Ghana's educational research data base and educational theory.

6.4.1: Significance of Problems identified

The general background of this study concerned examples of good practice and of pitfalls in the planning and execution of educational reforms in developing countries and the relevance of these for the future of Ghana's 1987 educational reform programme. The main focus was an exploratory study of the planning and implementation of the ongoing Ghanaian reform at the school level. Of particular interest were the congruence between curricular intentions and actual practice in schools, the attitudes of teachers and students in relation to the objectives of the reforms and the degree of integration of school work with community activities.

The results of the present study has shown that problems of incongruence and lack of integration between community life and school work were also problems that other developing countries such as Nigeria and Brazil faced in their educational reforms, so that these problems may be considered as quite common. On the other hand the study has also shown that aspects of good practice have some ecological limitations. For example, the success story of the SSCEP in New Guinea has been attributed to a number of ecological factors peculiar to Papua New Guinea (Vulliamy, 1990). The present study has therefore reiterated the need not only to take note of the pitfalls suffered by other developing countries so as to avoid them, but also to be wary of importing, without refinement, a project that has been acclaimed as a success in another country whose cultural practices may be quite different.

The present study has also identified a number of strengths and weaknesses associated withth ongoing reform programme. Thus, this study has provided information which may prove useful in making changes early so that the programme may not relapse into the old system.

The reform was begun at the JSS level. An important policy issue for the extension of the reforms below and above the secondary level concern what modifications to make to the strategy being employed at the moment to ensure that the transition is effective. The results of the present study provide information that may prove useful in this regard. However, it was recognised that it was quite

inappropriate to generalise from specific research data. Thus, whilst much information had been gathered through observations, interviews and questionnaires from four districts in the Brong-Ahafo Region which generally showed trends collaborated by informants in other regions, the fact that the researcher did not personally conduct systematic research in the other regions means that he needs to be aware of any inter-regional differences and differences among schools within regions. Accordingly, precaution to improve generalisability was taken by requesting a sample of teachers with national characteristics to identify the strengths and weaknesses of the reform programme in relation to what obtained in their schools and to compare the SSS students with students of the former system.

6.4.2 Unintended Consequences of the Reform

Some writers have observed that the incongruence between the objectives of an innovation as spelt out in the blueprint, as well as the unintended consequences have more effects whose importance are greater than the execution of the policy itself (Parlett and Hamilton, 1977). In the present work the deviations from the blueprint of the reform and the unintended consequences as well have both positive and negative effects. These are illustrated in the sections following.

6.4.2.1 Positive Effects of Unintended Consequences of Ghana 's 1987 Educational Reform Programme

One characteristic of the former educational system was its full reliance on external assessment for the purpose of certification. Consequently, teachers were

not keen on keeping accurate cumulative records about student progress. With the introduction of the reform programme attitudes to teacher assessment have changed both on the part of the teacher and the student. Because of the requirement that 40 per cent of student final score for certification should be on continuous assessment, record-keeping by teachers is now improving and teachers at all levels are acquiring the basic skills in test construction and administration. Also, students now know that it is risky to cut classes as failure to complete a class exercise or test can affect the continuous assessment component of the final score and, therefore, the final grade.

Another dimension of the unexpected consequences of the effects of the reform related to assessment was the lack of concurrent validity of the BECE for the first five batches of the JSS students. The present study has revealed cases where students in the case-study schools with top grades were barely literate. This draws attention to the need for moderation of continuous assessment scores and the better administration of the BECE. But the revelation also draws attention to the incongruence between curricular intentions and actual practice which some teachers, who were anxious to secure passes for their students, tried to conceal by resorting to irregular examination practices or massaging continuous assessment scores.

The reform process also had an unexpected effect which helped to restore the image of the Headmaster. In the mid-1980s, the image of the Headmaster was

damaged by a catalogue of persecutions initiated by the government ostensibly to check corruption. This measure reduced the influence of Heads of schools and the Conference of Heads of Assisted Secondary Schools (CHASS). Thus. when the government announced its intention to implement the 1987 educational reform. suggestions made by CHASS or by individual Headmasters were contemptuously ignored. Fortunately for the Headmasters, however, they were vindicated by the poor performance of the first batch of SSS students in the SSSCE. This forced the government to climb down and give Headmasters the attention that they deserve. Accordingly, the dignity of Headmasters has been restored and they are now providing useful professional advice to save the reform process.

6.4.2.2 Negative Effects of Unintended Consequences of Ghana 's 1987 Educational Reform Programme

The rapid implementation of the reform programme sparked off a mass of teacher transfers at very short notice. Most of these transfers, especially those which involved teachers who were teaching in the middle schools turned into junior secondary schools, were ***de facto*** demotions. Some teachers who had headed continuation schools for many years lost their posts if their academic qualifications were not of at least the GCE 'O' level standard. Such teachers were removed to primary schools while less experienced teachers with post-'O' level qualified teacher certificates were appointed to head the new junior secondary schools.

In Ghana the prestige of teachers vary according to the level at which they teach. Primary school teaching is generally associated with those with low academic

background. So teachers who were moved from the JSS to the primary schools felt that they had been demoted, even though their professional rankings remained unchanged and higher than those of most of the younger teachers appointed to replace them in the JSS.

The transfers put fear of insecurity into all non-graduate teachers . Teachers with specialist teachers' certificates and diplomas teaching in senior secondary schools felt that in a matter of time they would be forced down to JSS and probably to the primary schools by their own students when the students complete university and return to teach. Consequently, there has been a scramble for entry to undergraduate courses in universities by teachers in this category. Those teachers who cannot make it via the normal 'A' levels have become 'professional' mature student university entrance examination candidates, with a vow to keep on trying until they make it. Two-year post-diploma degree courses have been introduced at the University of Cape Coast and the University College of Winneba. But these measures have not eased the pressure.

The surge in teachers' desire for higher academic development is good. However, the negative effect about this is that teachers are increasingly neglecting their professional duties in order to prepare for 'A' levels or the Mature student examinations. Another variant of this problem is that a percentage of every batch of teachers granted study-leave to pursue degree courses leave the teaching profession. to seek employment outside the education sector. Research is needed

urgently to determine the seriousness of this problem as it has implications for improving teacher quality and also enforcing the contractual obligations of teachers.

Another avenue for teacher attrition relates to certain quasi- political institutions that were established as part of the general socio-economic reform process. Two of such institutions, namely the Non-formal Education Unit and the Centre for Civic Education, are 'poaching' teachers from the classrooms. These bodies, due to their quasi-political status, provide better incentives to their personnel than the teachers in the schools get. Therefore teachers are keen to accept jobs in these departments in preference to regular school teaching. This further worsens the staffing situation in the schools.

Another negative unexpected effect of the reform is the development of a culture of education for examination among school children at all levels, especially in the urban areas. Private classes are organised after school hours and teachers charge exorbitant fees for these classes. Before the reforms, such classes were restricted to vacation periods and were mainly attended by students in their final year of the GCE courses or re-sit candidates. Now children at all levels are involved. Teachers claim that the syllabuses are extensive and the subjects are many. So students who wish to pass the external examinations must attend private classes. It has become apparent that many teachers neglect their normal duties in order to compel more students to enrol on the private classes so that the teachers can

maximise their earnings from these classes. One effect of this has been an increase in the educational bills of parents. And for students, the intrinsic motive for learning is increasingly being lost as the students become more and more obsessed about passing examinations, to the extent that attention is paid only to things that will be examined. Besides, the children are missing out on developing positive attitudes and skills through sports, games and even ordinary playground activities. Indeed it is an under-statement to say that the Ghanaian child is losing his childhood because of the pressures of examinations.

6.4.3 Contribution to Theory

Educational provision in Ghana has gone through a catalogue of reforms both before and after independence. The purpose of these reforms have been to reform a Western model education system to one that would meet the cultural, social and economic needs of the country. At the heart of these reforms have been efforts to project agriculture and later, through the continuation school system, to impart pre-vocational and pre-technical skills that would complement skills in agricultural production. All of these efforts made no impact.

In the decade of the 1970s, such initiatives became known as 'relevance education' innovations and their failure is documented in various sources (see, for e.g., Sinclair and Lillis, 1980; Bacchus, 1980; Psacharopoulus, 1980; Lillis and Hogan, 1983). One exception appears to be the Secondary Schools Community Extension Project in Papua New Guinea which has been considered to be an interesting case of education for rural development (Vulliamy, 1990; Bacchus,

1982) and Lillis and Hogan think it may provide a formula for diversifying secondary education.

Research on the SSCEP has illuminated the debate on the obstacles to successful innovations. The major strands of the arguments have been that unless and until rural-urban inequities are reduced through social and economic reform, attempts at relevance education will fail (Foster, 1965, 1982). Therefore proponents of this view suggest traditional academic models as better options towards modernisation. On the other hand, neo-Marxists argue that the school is powerless in effecting such reforms without major structural transformation in the political-economic domain.

Other writers identify obsession with the acquisition of certificates, known as the 'diploma disease' (Dore, 1976, 1980) or the 'paper qualification syndrome', as the major constraint to the provision of relevance education (Little and Dore, 1982; Oxenham, 1984). The major cause of the diploma disease is believed to be the disparities between the modern and subsistence sectors of the economy.

The effects of the 'diploma disease' have been elaborated in many developing countries (see, for e.g., Dore, 1976; Bacchus, 1980; Lewin and Little, 1984). These researches have culminated in refinements to Dore's original exposition that the symptoms of the 'diploma disease' were at their worst where there exists a centralised examination system that effectively selects candidates for further

training (Dore, 1980: 57-8). Vulliamy (1990, 1982) provides some examples of such refinements, which point out that the content of the centralised examination can minimise the effects of the diploma disease while teachers' philosophy of legitimate schooling can convey 'diploma disease' symptoms to students.

The results of the present study suggest that the traditional academic model of education proposed by Foster (1965) and others tends to work against the very idea of reducing rural-urban inequities which are supposed to be necessary for relevance education. Also, the neo-Marxist argument is quite irrelevant in the Ghanaian case: for, the present educational reform programme was introduced within the framework of major transformation in the political-economic domain and yet it got into serious problems. The overriding factor that appears to be having profound influence on the course and tempo of the reform is the incidence of the diploma disease.

The present study points to a spread of the effects of the diploma disease throughout Ghana's educational system. The economic disparities between the formal and informal sectors of the economy are certainly important sources of the disease. But these do not fully explain the Ghanaian case. The pursuit of university education by primary and JSS teachers and other non-graduate teachers does not so much have to do with economic differentials as with 'security': a desire to avoid the 'shame' of being forced to teach at lower levels of the education system. The reasoning behind this is a linear process: new system

demands teachers with higher certificates; therefore non-graduate teachers in SSS are pushed down to JSS and JSS teachers, in turn, believe that sooner than later . they too will be pushed down to primary schools. These perceived changes do not necessarily imply any loss in earnings; but they do imply loss of prestige within the community which is interpreted as no less than failure.

Consequently, the diploma disease will not necessarily be cured by bridging the gap between wage differentials associated with occupations or reducing the discrepancies between the modern and subsistence sectors of the economy.

Yet the 'diploma disease' is eating into the entire educational system, worsened by the attitude of teachers. Students and their parents as well as their teachers are obsessed about examination outcomes and the implications they have for further education and training. Thus, much attention is diverted from adjusting pedagogical practice and exploring ways of bridging the gap between the actual intentions of the innovation and what is happening in the schools.

The nature of the diploma disease in Ghana may be explained by two hypotheses based on concepts borrowed from economics. These concepts are the relative-income hypothesis and the rational expectations hypothesis. The relative-income hypothesis, developed by James Duesenberry, is a theory of consumption and saving which suggests that individuals are more concerned with their consumption relative to other people's than they are with their absolute living standard. Thus

everyone wishes to 'keep up with the Mensahs' in their consumption, so that the poor will spend a higher proportion of their income than the rich. On the other hand, the rational expectations hypothesis postulates that individuals behave in such a way that their predictions contain no systematic errors (see Bannock *et al.* 1987).

For the purpose of the present report, the terms coined from the above economic concepts are the relative-prestige hypothesis and the illusory rational expectations hypothesis. The relative-prestige hypothesis explains the ***predisposing factors*** of the 'diploma disease'. The community measures the success of the educand by the occupational prestige he commands relative to not only his age cohort but also those immediately below and above him / her. Given that, among Ghanaian youth, prestige is very highly correlated with income as established by Foster (1965) and collaborated by the case studies of the present study, which in turn has a high association with the type of certificate held, the first thing that stakeholders consider when an innovation is announced tends to be how the certificate to be awarded after completing the innovative programme will enhance relative-prestige. Thus there is pressure on teachers to direct attention to only what will count towards certification to improve the chances of the educand for selection to higher levels of education.

The illusory rational expectations hypothesis explains the ***propagating factors*** of the diploma disease. Stakeholders have the illusion that they are making rational

decisions that will ensure that they do not miss out on the opportunities that may arise from an innovation or suffer the adverse effects of the innovation. Thus, two modes of behaviour are called into play: the innovation is opposed when stakeholders cannot immediately establish a congruence between their expectations in the next period and what the innovation seeks to deliver; or the 'maintain standards' argument is activated and diverts attention away from the non-examinable but essential features of the innovation. Thus, cramming and coaching for examinations overshadow teaching and learning for understanding and application. After the initial round of 'success' stakeholders realise that their rational expectations were an illusion; so that in order to remain in the race for relative prestige, another round of coaching ensues to pass the next examination, and the next one, and the next one... rather than to learn a particular skill to apply in a particular occupation now.

From the foregoing analysis, a central theoretical conclusion of the present study is that any educational reform programme in Ghana must involve long-term inter-sectoral planning, experimental projects and effective monitoring and evaluation. This is necessary to break a culture of schooling that gives the false impression that every higher level paper qualification provides a passport to traditional prestigious occupations. Planning, consultation, experimentation, and evaluation that involve communities will reduce the effects of the symptoms of relative-prestige and illusory rational expectations. The culture of schooling are then likely to shift to skills required for the exigency of the community, thus making it

easier to base selection for further education and training on aptitude and practical skills rather theoretical superficial knowledge. The proactive model of educational reform suggested in section 6.3 is consistent with this theoretical conclusion.

6.5 Areas for further Research

The present study is an exploratory study and serves as a formative evaluation of the 1987 educational reform programme in the case-study schools. Several issues that require further investigation have been pointed out in the body of the report. Some of these are now elaborated here. The first is to widen the scope of the case studies in terms of the number of sites and the time period to remove the constraints that were imposed on the present study and to improve the ecological validity of the results. This would then facilitate a comparative study of the reform in action in different communities. These case studies could also be replicated in other education districts.

A second area for research is the investigation of the paradox whereby students identify subjects, such as English Language in which they are known to be weak, as their favourite subjects. The result of such an investigation has important implications for improving instruction not only in the so-called favourite subjects but also the most hated subjects.

Third, the difficulty level of topics in the new syllabuses need to be established to guide curriculum planners and teachers in deciding what to retain or remove from the syllabuses.

Finally, a data base on the type of skills communities believe to be crucial for their progress needs to be created through ethnographic studies. This would help in designing curriculum materials that would be sufficiently flexible and adaptable to suit local needs.

6.6 Summary

This chapter has assessed the prospects and potential of Ghana's 1987 educational reform programme for development. The present study suggests that Ghanaian education must tackle the problems of a schooling culture that thrives on a notion of relative prestige and an illusion of rational expectations. The way forward suggested by the study is the adoption of a proactive model of educational reform which encourages all sectors to participate in making educational decisions and implementing such decisions. A number of gaps in the research have been identified for further investigation to refine the reform process.

APPENDIX A

A STUDY OF GHANA'S 1987 EDUCATIONAL REFORM PROGRAMME
UNIVERSITY OF HULL, ENGLAND
Teacher Questionnaire

Ed Ref Survey
Category: Trs 1,2
No._____ 01-70

The following questions are part of a study of the role of educational reform in development being done by a researcher from the University of Hull, England. The researcher would like to know your views about the new structure and content of education at the level where you are involved. He will particularly welcome your views about the planning, and implementation of the educational reform programme, what you think about the curriculum materials being used in the schools and what you think regarding the prospects of the present educational system. The information that you will provide may enable Ghanaian education authorities to make your work more enjoyable and make the education that you provide more relevant to the development needs of Ghana.

Your views will be held in confidence. The researcher promises not to disclose your answers to any person in your school. Moreover, your name will not be put on your answer sheet. So nobody will be able to attribute any particular responses to you.

Please indicate your response by circling the code number to the left of the answer that suits you. In a few cases, you are required to write down your answer; please do so in the space provided.

1. Sex:
   1. Male
   2. Female

3

2. Age:
   1. Less than 20
   2. 20 - 29
   3. 30 - 39
   4. 40 - 49
   5. 50 and above

4

3. For how long have you been a teacher?
   1. Less than 5 years
   2. 5 - 9 years
   3. 10 - 14 years
   4. 15 - 19 years
   5. 20 - 24 years
   6. 25 - 29 years
   7. 30 or more years

5

4. What is your highest academic qualification?
   1. M S. L C.
   2. S. C. / G C E. 'O' LEVEL
   3. G. C. E. 'A' LEVEL
   4. B.A /B.Sc
   5. M.A /M.Sc
   6. Other (please specify)_____

6

5. What is your highest professional qualification?
   1. Cert. 'A' (4-year Post-middle)
   2. Cert. 'A' (Post-B)
   3. Cert. 'A' (2-year Post-sec)
   4. Cert. 'A' (3-year Post-sec)
   5. Specialist Certificate in (subject)_____
   6. Diploma in (subject)_____
   7. B.Ed
   8. M.Ed
   9. Other (please specify)_____

7
8-13
14-19
20-22

6 (a). What subject(s) do you teach? _____ 23-25
(b).How many periods per week do you teach? _____ 26-29

7. How long have you been in your present school?
1. Less than 5 years 30
2. 5 - 9 years
3. 10 - 14 years
4. 15 or more years

8.(a). Do you have a child or ward in JSS or SSS?
1. Yes 31
2. No.

(b) If you answered 'Yes' to Q.8(a), would you move your child or ward to a school that offers a curriculum which differs from the JSS curriculum, if there was such a school?
1. Yes 32
2. No

9.(a). What do you consider to be the most important advantages of the new structure and content of education? 33-35

_____
_____
_____
_____

(b). What, in your view, are the main disadvantages? 36-39

_____
_____
_____

10. What, in your opinion, are the main objectives of the educational reform programme adopted in 1987? 40-44

_____
_____
_____
_____

11. Would you say that what happens in your school reflects these objectives?
1. Yes, to a large extent 45
2. In several respects, it does
3. In only a few cases
4. Not at all

12. Overall, how would you describe the present junior and senior secondary school programmes? Please circle the code numbers of all the answers which you feel are relevant. 46
1. Very useful in terms of vocational and academic preparation.
2. Useful in vocational preparation, but does not ensure higher academic standards by the end of SSS.
3. Not useful in terms of vocational preparation, but does provide adequate academic preparation for further education.
4. Not useful at all; the former system of education was better.

13. To what extent would you say that the practical work and classroom work are genuinely related? 47
1. To a very large extent
2. Only in a few cases
3. Not linked at all

14. What kind of facilities do you feel are needed to promote the kind of teaching expected under the educational reform programme? 48-50

_____

_____

15. Which of the following methods of assessment do you use? Check all which apply.

1. regular written exercises based on each unit of instruction 51-54
2. written test based on the term's work
3. oral tests
4. projects completed by students in groups
5. projects completed by individual students
6. other (specify)_____

16. Which of the following remarks describes your feelings about the syllabus(es) that you use?

1. All right in all respects 55
2. Over-loaded, terse and difficult to tell exactly what must be taught and what could be left out.
3. Over-loaded but clearly set out and easy to interpret.
4. Not flexible; no room for adaptation to suit local conditions
5. Pitched above the level of the students
6. Other (specify)_____

17. Do you believe that you were sufficiently prepared to use the materials and the syllabuses of the new content of JSS/SSS education?

1. Yes, very well prepared 56
2. Quite well prepared
3. Not adequately prepared.
4. Not prepared at all

18. If you were properly prepared, how were you prepared?

1. Through national level in-service courses 57
2. Through regional level in-service courses
3. Through district level in-service courses
4. Through in-service courses mounted by my subject Association
5. Through in-service courses given by inspecting /circuit officers
6. Through training programme at college/university

19. If you were already a teacher before 1987, would you say that you have had to adjust your teaching strategies as a result of the educational reform?

1. Yes 58
2. No

20. If you answered 'Yes' to Q.19, please state what you now do differently.

_____ 59-60

_____

21.(a). Do you have any particular book(s) based on the syllabus in use?

1. Yes 61
2. No

(b). If yes, how would you rate the book(s)?

1. Clearly written, cover(s) all parts of the syllabus, well illustrated, and meet(s) the needs of both the teacher and the students 62
2. All right for the teacher but too difficult for the students
3. Poorly illustrated, few or no diagrams or pictures; examples are irrelevant or unfamiliar
4. Incomprehensible to both teacher and students
5. Does not cover all topics in the syllabus

22. What specific problems do you encounter in your work as a teacher as a result of the adoption of the present system of education? 63-65

_____

_____

_____

23. What changes would you like to be made in the present structure and content of education? 66-69

_____

_____

_____

*** FOR SSS TEACHERS ONLY**

24. If you had your way, how long would you make the SSS course last?

1. Three years (no change) 70
2. Four years
3. Five years
4. Other (specify)_____

25. Compared with students you have taught under the former system, how would you rate your SSS students? 71-74

_____

_____

_____

Thank You!

APPENDIX B

A STUDY OF GHANA'S 1987 EDUCATIONAL REFORM PROGRAMME
JSS STUDENT QUESTIONNAIRE:

ED REF SURVEY
CATEGORY: JSS 1-3
No._____ 001-700

The following questions are part of a study being made by a researcher from the University of Hull, England. The study is aimed at learning about the various interests which Ghanaian junior secondary school students have. The researcher would like to know particularly about what you would like to do after you leave school and what you hope to be doing after leaving JSS. The information you give will be useful in planning better things for future JSS students. The information will also be helpful in catering for your needs when you leave school.

What you will be required to do is not a test. So please answer each question the way you truly think, not the way somebody thinks. There are no right and wrong answers: your views are just as right as any other person's views and the researcher wants your views. As you will see, the researcher will not ask for your name and he promises you that no one in the school will see your answers.

Simply show your answer by circling the number to the left of one (or more, if that is what a particular question requires) of the different answers provided. Where you are required to write your answer, do so in the space provided.

1. What is your sex? 4
   1. Male
   2. Female

2. In what form are you? 5
   1. Form One
   2. Form Two
   3. Form Three

3. What is your age? _____ 6-8
4. What is your favourite subject? _____ 9-19

5. Which of these pre-vocational subjects do you study? 20
   1. Woodwork (Carpentry, etc.)
   2. Leather work (shoemaking, etc.)
   3. Weaving
   4. Tailoring/ Dressmaking
   5. Electronics
   6. Metalwork

6. Do you hope to continue your full-time education after you have completed the junior secondary school course? 21
   1. Yes
   2. No.

7. Looking realistically at your future, how would you regard your chances of continuing your education after the JSS course? Please circle the number of the answer that you agree with. 22
   1. I will be sure to continue.
   2. I have a good chance of continuing my education
   3. I will not really be likely to continue my education.
   4. I will certainly not be able to continue.

8. If you do have a chance to continue your education, what kind of senior secondary school do you hope to go to? 23

1. General Arts and Science secondary senior secondary school
2. Agricultural senior secondary school
3. Technical senior secondary school
4. Business senior secondary school
5. Another kind of school not mentioned (if so, what?)_____

9. If you were free to choose whatever senior secondary school you would like to go to, what three schools would you choose? Please write down their names, putting the one you like most first. 24

1. 1st choice_____
2. 2nd. choice_____
3. 3rd. choice_____

10. What do you think is the best reason for choosing a school among these three schools? 25

1. It is near my home
2. It is a school with good examination results
3. It does not cost much to go to
4. It is run by my religious denomination
5. My sister/ brother went there
6. My father/ mother likes it
7. Another reason not mentioned (state what)_____

11. If you are not able to enter senior secondary school what would you like to do? 26

_____

_____

12. Where were you born? If you were born in Ghana, write down the name of the town or village _____ 27

the district _____ 28

the region _____ 29

13. What is the highest level of education that your father had? 30

0 Did not go to school
0.1 Had some primary school education
0.11 Finished primary school
1 Had some senior primary or middle school education
2 Finished senior primary or middle school
3 Had some secondary school education
4 Finished secondary school
5 Attended post-middle school teacher training college
6 Attended post-secondary teacher training college
7 Went to a university (if so, where?) _____
8 Finished another kind of school (if so, what?) _____
9 Don't know

14. What work does your father do? Please explain the work he does exactly. If he is retired or dead, please write down what he used to do, if you know. 31

_____

_____

_____

15. For whom does/ did your father work?

1. For himself 32

2. For a government department
3. For someone else
4. Don't know

16. How do you feel about the JSS course?
1. It is interesting 33
2. It is quite interesting
3. It is not interesting.

17. What do you like most about the JSS course? Please give a reason. 34

_____

_____

18. What do you not like about the JSS course? Please state your reason . 35

_____

_____

19. How does your father feel about the JSS course?
1. He thinks it is useful 36
2. He does not like it
3. I don't know

20. Which of these do you believe to be your father's reason(s) for not liking the JSS course? Circle as many reasons as you think describe your father's feeling.
1. He pays a lot of money 37
2. There is too much practical work
3. The students do not learn much to qualify for SSS
4. I don't know
5. Another reason (if so, what?) _____

Thank you!

APPENDIX C

A STUDY OF GHANA'S 1987 EDUCATIONAL REFORM PROGRAMME
SSS STUDENT QUESTIONNAIRE

ED REF SURVEY
CATEGORY: SSS 2
No._____ 001-700

The following questions are part of a study being made by a researcher from the University of Hull, England. The study is an attempt to learn about the various interests which Ghanaian senior secondary school students have. The researcher would like to know particularly about your plans for the future after you have left school and what you hope to be doing after you have completed senior secondary school. This information will be helpful in making secondary education in Ghana more relevant to the needs of students and the country.

You are NOT taking a test. There are no right and wrong answers. So answer all the questions the way you truly think. Do not copy your neighbour's answers nor allow your neighbour to copy your answers. The researcher will not ask for your name and he promises you that he will not allow anybody in the school to see your answers.

A number of answers are provided to most of the questions. To indicate your choice of answer, just circle the code number on the left hand side of the chosen answer. Where you are required to write down your answer, do so in the space provided.

1. What is your sex? 3
   1. Male
   2. Female

2. In what form are you? 4
   1. Form One
   2. Form Two
   3. Form Three

3. What is your age? _____ 5-7

4. Where were you born? State your Village or Town _____ 8-10
   District _____
   Region _____

5. What is your area of study? 11
   1. General Arts course
   2. General Science course
   3. Agricultural Science course
   4. Technical course
   5. Business/Commercial course
   6. Other (if so, what?) _____

6. State THREE of your favourite senior secondary school subjects, putting the one you like most first. 12-30
   1st. _____
   2nd _____
   3rd _____

7. What pre-vocational subjects did you study at JSS? 31
   1. Woodwork (carpentry)
   2. Leather work (shoemaking)
   3. Electronics
   4. Weaving
   5. Dressmaking/Tailoring
   6. Other (if so, what?) _____

8. Did you really learn how to make or to repair anything?
   1. Yes, make (what?)_____ 32-34
   2. Yes, repair (what?)_____
   3. No

9. Would you like to have continued with the vocational subjects?
   1. Yes. If so, why? _____ 35-38
   2. No. Any reason? _____

10. (a). What did you NOT like about the JSS course? 39-41
_____

(b). How did your father feel about the JSS course?
_____ 42-44

11. Do you hope to continue your full-time education after you have completed senior secondary school?
   1. Yes 45
   2. No

12. Looking realistically at your future, how would you regard your chances of continuing your education after the SSS course?
   1. Will be certain to continue my education 46
   2. Have a good chance of continuing my education
   3. Will not really be likely to continue my education
   4. Will certainly not be able to continue my education

13. If you do have a chance to continue your education, what kind of institution do you hope to go to?
   1. A teacher training college 47
   2. A nursing training college
   3. An agricultural college
   4. A polytechnic
   5. The University of Cape Coast
   6. The University of Ghana, Legon
   7. The University of Science and Technology, Kumasi
   8. The University of Development Studies, Tamale
   9. The University College of Winneba
   10. Another college not mentioned (if so, what?) _____

14. What kind of course do you hope to study if you should go to university.?
   1. Arts course 48
   2. Business course
   3. Science or mathematics
   4. Engineering
   5. Planning or Architecture
   6. Nursing
   7. Law
   8. Medicine
   9. Agricultural Science
   10. Education or Teacher Training course
   11. Other course (what?) _____
   12. Not yet decided

15. (a).If you were free to choose where to work after completing SSS, where would you like to work? 49
   1. In a city
   2. In a town
   3. In a village
   4. Anywhere

(b). Why would you like to work there? _____ 50-54
_____

16. What kind of work would you like to do if you do not proceed to the university, college or polytechnic? _____ 55-59

17. From your experience and that of your friends who have left SSS already, what kind of job do you think you are most likely to get after completing SSS?

_____ 60-64

18. What level of education did your father attain? Just circle the code number to the left of the answer of your choice. 65

X Did not go to school
Y Had some primary school education
0 Finished primary school
1 Had some senior primary or middle school education
2 Finished senior primary or middle school
3 Had some secondary school education
4 Finished secondary school
5 Attended teacher training college
6 Went to a university (if so, what?) _____
7 Finished another kind of school (if so, what?) _____
8 Don't know

19. What work does your father do? If he is retired or dead, please write down what he used to do, if you know. 66-69

_____

20. For whom does/did your father work? 70

1. For himself
2. For a government department
3. For someone else

21 For whom would you yourself like to work? 71

1. For myself
2. For a government department
3. For someone else

22. Below is a list of jobs that Ghanaians have. Read the list carefully and, against each job, indicate the prestige and respect in which this job is held. Put an X on the line that describes the job most exactly.

Job	Very High Prestige	High Prestige	Average Prestige	Low Prestige	Very Low Prestige	
Priest or Pastor	----------1	----------2	----------3	---------- 4	----------5	72
Nurse	----------1	----------2	----------3	---------- 4	----------5	73
Medical Doctor	----------1	----------2	----------3	---------- 4	----------5	74
Policeman	----------1	----------2	----------3	---------- 4	----------5	75
Soldier	----------1	----------2	----------3	---------- 4	----------5	76
Author	----------1	----------2	----------3	---------- 4	----------5	77
Business-man	----------1	----------2	----------3	---------- 4	----------5	78
Farmer	----------1	----------2	----------3	---------- 4	----------5	79
Farm Labourer	----------1	----------2	----------3	---------- 4	----------5	80
Carpenter	----------1	----------2	----------3	---------- 4	----------5	81
Chief	----------1	----------2	----------3	---------- 4	----------5	82
Pr teacher	----------1	----------2	----------3	---------- 4	----------5	83
JSS teacher	----------1	----------2	----------3	---------- 4	----------5	84
SS. teacher	----------1	----------2	----------3	---------- 4	----------5	85
University Lecturer	----------1	----------2	----------3	---------- 4	----------5	86
Car fitter	----------1	----------2	----------3	---------- 4	----------5	87
Petty trader	----------1	----------2	----------3	---------- 4	----------5	88
Shop assistant	----------1	----------2	----------3	---------- 4	----------5	89
Engineer	----------1	----------2	----------3	---------- 4	----------5	90
Lawyer	----------1	----------2	----------3	---------- 4	----------5	91
Office worker	----------1	----------2	----------3	---------- 4	----------5	92
M P	----------1	----------2	----------3	---------- 4	----------5	93
Street cleaner	----------1	----------2	----------3	---------- 4	----------5	94

23. Here again are the same jobs. Now indicate your view on the money these people earn. Put an X on the line opposite the jobs that you think describes the incomes these people earn.

Job	Very High Income	High Income	Average Income	Low Income	Very Low Income	
Priest or Pastor	----------1	--------2	---------3	----------4	----------5	95
Nurse	----------1	--------2	---------3	----------4	----------5	96
Doctor	----------1	--------2	---------3	----------4	----------5	97
Policeman	----------1	--------2	---------3	----------4	----------5	98
Soldier	----------1	--------2	---------3	----------4	----------5	99
Author	----------1	--------2	---------3	----------4	----------5	100
Business-man	----------1	--------2	---------3	----------4	----------5	101
Farmer	----------1	--------2	---------3	----------4	----------5	102
Labourer	----------1	--------2	---------3	----------4	----------5	103
Carpenter	----------1	--------2	---------3	----------4	----------5	104
Chief	----------1	--------2	---------3	----------4	----------5	105
Primary teacher	----------1	--------2	---------3	----------4	----------5	106
JSS teacher	----------1	--------2	---------3	----------4	----------5	107
SS teacher	----------1	--------2	---------3	----------4	----------5	108
University Lecturer	----------1	--------2	---------3	----------4	----------5	109
Car fitter	----------1	--------2	---------3	----------4	----------5	110
Office worker	----------1	--------2	---------3	----------4	----------5	111
M P	----------1	--------2	---------3	----------4	----------5	112
Shop assistant	----------1	--------2	---------3	----------4	----------5	113
Engineer	----------1	--------2	---------3	----------4	----------5	114
Lawyer	----------1	--------2	---------3	----------4	----------5	115
Street cleaner	----------1	--------2	---------3	----------4	----------5	116
Petty trader	----------1	--------2	---------3	----------4	----------5	117

Thank you.

APPENDIX C*

A STUDY OF GHANA'S 1987 EDUCATIONAL REFORM PROGRAMME
SIXTH FORM STUDENT QUESTIONNAIRE

ED REF SURVEY
CATEGORY: SF 3
NO._____ 001-700

The following questions are part of a study being made by a researcher from the University of Hull, England. The researcher wants to learn about the various interests of Ghanaian secondary school students. He would like to know particularly about what you would like to do after you leave school and what you hope to be doing after the sixth form (and after national service). The information that you give will be useful in planning post-secondary courses and other training programmes that will be more beneficial to secondary school leavers and also suit the development needs of Ghana.

Your answers will be confidential; the researcher will not ask for your name and will not allow anyone in the school to see your answers. You, on your part, should not discuss your answers with anybody. Feel free to answer the questions the way you truly think. Don't try to copy someone else's answers. Be assured that this is not a test and that there are no correct and wrong answers.

In most cases, all you need do is circle the code number to the left of the answer that you think is the appropriate response you would like to make. Where you are required to write down your answer, please do so in the space provided.

1. What is your sex? 4
   1. Male
   2. Female

2. Form: 1. Lower Six 5
   2. Upper Six

3. Age: _____ 6-8

4. What is your subject combination? _____ 9-14

5. Where were you born?
   Name of Town or Village _____ 15-18
   Which District _____
   Which Region _____

6. Do you hope to continue your full-time education after you have completed the sixth form? 19
   1. Yes
   2. No.

7. Looking realistically at your future, how would you regard your chances of continuing your education beyond the Sixth form? 20
   1. Will be certain to continue my education
   2. Have a good chance of continuing my education
   3. Will not really be likely to continue my education
   4. Will certainly not be able to continue my education

8. If you do have a chance to continue your education, what kind of institution do you hope to go to? 21
   1. A teacher training college
   2. A nursing training college
   3. An agricultural college
   4. A polytechnic
   5. The University of Cape Coast
   6. The University of Ghana, Legon
   7. The University of Science and Technology, Kumasi
   8. The University College of Winneba
   9. The University of Development Studies, Tamale
   10. Another institution not mentioned (if so, what?) _____

9. What kind of course would you like to study there? 22

1. Arts course (e.g. languages, history, R.S., economics geography ,etc.)
2. Business course (e.g. accountancy, commerce, management, etc.)
3. Science or mathematics
4. Engineering
5. Nursing
6. Law
7. Medicine
8. Agricultural Science
9. Planning or Architecture
10. Education or teachers' course
11. Other course (specify) _____
12. Not yet decided

10. What kind of job would like to have more than any other?_____23-29

_____

11. From your experience and the experience of your friends who have left the sixth form, what kind of job do you think you are more likely to get if you do not go beyond the sixth form level?

_____ 30- 34

12. If you were to freely choose where to work, what kind of place would you like to work in?

1. City 35
2. Town
3. Village
4. Anywhere

Why would you choose to work there? _____ 36-39

13. What do you think is the best reason for choosing your present school for the sixth form course? 40

1. It is near my home
2. It is where I did my 'O' level course
3. It is a school with good exam results
4. It is managed by my religious denomination
5. My father/mother likes it
6. My brother/sister did Sixth Form here
7. It is not expensive to go to
8. Other (specify) _____

14. What level of education did your father attain? Just circle the code number to the left of the highest level that he reached. 41

X Did not go to school
Y Had some primary school education
0 Finished primary school
1 Had some senior primary or middle school education
2 Finished senior primary or middle school
3 Had some secondary school education
4 Finished secondary school
5 Went to a university If so, what?) _____
6 Attended teacher training course
7 Finished another type of school (if so, what?) _____
8 Don't know

15. What work does your father do? Please explain the work exactly. If he is retired or dead, please write down what he used to do, if you know._____ 42-45

_____

16. For whom does/did your father work?

1. For himself 44
2. For a government department
3. For someone else

17. For whom would you yourself like to work, if you were free to choose?
    1. For myself 45
    2. For a government department
    3. For someone else

What is the reason for your choice? _____

18. Below is a list of different types of jobs that Ghanaians have. Read the list carefully and, against each job, indicate the prestige and respect in which this job is held. Put an X on the line which describes the job most exactly.

Job	Very High Prestige	High Prestige	Average Prestige	Low Prestige	Very Low Prestige	
Priest or Pastor	----------1	----------2	----------3	----------4	----------5	46
Nurse	----------1	----------2	----------3	----------4	----------5	47
Policeman	----------1	----------2	----------3	----------4	----------5	48
Soldier	----------1	----------2	----------3	----------4	----------5	49
Primary Teacher	----------1	----------2	----------3	----------4	----------5	50
JSS teacher	----------1	----------2	----------3	----------4	----------5	51
SSS Teacher	----------1	----------2	----------3	----------4	----------5	52
University Lecturer	----------1	----------2	----------3	----------4	----------5	53
Carpenter	----------1	----------2	----------3	----------4	----------5	54
Shop Assistant	----------1	----------2	----------3	----------4	----------5	55
Office worker	----------1	----------2	----------3	----------4	----------5	56
Chief	----------1	----------2	----------3	----------4	----------5	57
Farmer	----------1	----------2	----------3	----------4	----------5	58
Farm Labourer	----------1	----------2	----------3	----------4	----------5	59
Author	----------1	----------2	----------3	----------4	----------5	60
Street cleaner	----------1	----------2	----------3	----------4	----------5	61
Engineer	----------1	----------2	----------3	----------4	----------5	62
Car fitter	----------1	----------2	----------3	----------4	----------5	63
Petty Trader	----------1	----------2	----------3	----------4	----------5	64
MP	----------1	----------2	----------3	----------4	----------5	65
Businessman	----------1	----------2	----------3	----------4	----------5	66
Medical Doctor	----------1	----------2	----------3	----------4	----------5	67
Lawyer	----------1	----------2	----------3	----------4	----------5	68

19. Here are the same jobs again. Now indicate your view on the money these people earn. Put an X on the line opposite the jobs that you think describes the incomes these people earn.

Job	Very High Income	High Income	Average Income	Low Income	Very Low Income	
Priest or Pastor	----------1	--------2	---------3	--------4	----------5	69
Nurse	----------1	--------2	---------3	--------4	----------5	70
Policeman	----------1	--------2	---------3	--------4	----------5	71
Soldier	----------1	--------2	---------3	--------4	----------5	72
Primary Teacher	----------1	--------2	---------3	--------4	----------5	73
JSS Teacher	----------1	--------2	---------3	--------4	----------5	74
SSS Teacher	----------1	--------2	---------3	--------4	----------5	75
University Lecturer	----------1	--------2	---------3	--------4	----------5	76
Carpenter	----------1	--------2	---------3	--------4	----------5	77
Shop Assistant	----------1	--------2	---------3	--------4	----------5	78
Office Worker	----------1	--------2	---------3	--------4	----------5	79
Chief	----------1	--------2	---------3	--------4	----------5	80
Farmer	----------1	--------2	---------3	--------4	----------5	81
Farm Labourer	----------1	--------2	---------3	--------4	----------5	82
Author	----------1	--------2	---------3	--------4	----------5	83
Street Cleaner	----------1	--------2	---------3	--------4	----------5	84
Engineer	----------1	--------2	---------3	--------4	----------5	85
Car fitter	----------1	--------2	---------3	--------4	----------5	86
Petty Trader	----------1	--------2	---------3	--------4	----------5	87
MP	----------1	--------2	---------3	--------4	----------5	88
Businessman	----------1	--------2	---------3	--------4	----------5	89
Medical Doctor	----------1	--------2	---------3	--------4	----------5	90
Lawyer	----------1	--------2	---------3	--------4	----------5	91

20. How would you compare the new (JSS and SSS) system with the system under which you have been educated? 92
    1. My system is better
    2. The JSS/SSS system is better
    3. No difference.

Why? _____ 93-99 THANK YOU!

APPENDIX D

A STUDY OF GHANA'S 1987 EDUCATIONAL REFORM PROGRAMME
STAKEHOLDERS INTERVIEW SCHEDULE

ED REF. INT.

CATEGORY: MISC. NO. ___ 1-35

INTRODUCTION: Hello, I'm doing a study on the role of education in Ghana's development. I'd like YOUR opinion on some topics of interest.

A. EDUCATION AUTHORITIES

1.0 OBJECTIVES AND CONCEPTUALISATION OF THE NEW SYSTEM

1.1 How did the idea for the present educational reform originate? 36-40

1.2 How strongly, would you say, was the need for change of the education system felt by the following groups?

Political leaders	VERY STRONGLY	STRONGLY	NOT TOO STRONGLY	NOT AT ALL	NO NEED	
Educational leaders	_____1	_____2	_____3	_____4	_____5	41
Teachers	_____1	_____2	_____3	_____4	_____5	42
Employers	_____1	_____2	_____3	_____4	_____5	43
Parents	_____1	_____2	_____3	_____4	_____5	44
Universities	_____1	_____2	_____3	_____4	_____5	45

1.3 Who analysed the need for change?
1. Officials of the GES / MOE 47
2. Consultants from Ghanaian universities
3. Consultants from foreign countries
4. Don't know 48

1.4 Which of these persons were involved in defining the objectives of the educational reform proaramme?
1. Officials of the GES / MOE
2. School teachers
3. Teachers' Unions
4. Consultants from Ghanaian universities
5. Other (specify) _____ 50-54
6. Don't know 55

1.5(a) Would you say that there was consensus within the MOE and GES on the objectives of the educational reform programme?
1. Yes **56**
2. No
(b) If no, please explain briefly **57-59**

1.6 What do you believe to be the most important objectives of the educational reform programme? 60-65

1.7(a) Have the objectives been modified since the implementation of the programme was begun?
1. Yes 66
2. No
(b) If yes, please explain how and why. 67-69

1.8 To what extent would you say that the official objectives of the reform programme are realistic?
1. Very realistic 70
2. Somewhat realistic
3. Unrealistic
4. Not at all realistic

1.9 What specific benefits, in your opinion, is the educational reform programme expected to bestow on the educand? 71-84

1.10 In what ways do you consider the present educational system to be relevant to the development goals of Ghana? 85-90

2.0 PLANNING & CURRICULAR ISSUES

2.1 Were you, yourself, aware of a distinct period of the reform process which could be called the 'planning phase'?

1. Yes, very distinct (from..... to....) 01-12 90
2. Yes, but not very distinct
3. Planning occurred throughout, not a distinct phase
4. Very little planning at any time.
5. No planning at all

2.2 Would you say that the plans for implementation were clearly specified before the programme was adopted?

1. Yes, clearly in great detail 91
2. Yes, clearly but not in detail
3. Yes, but not clearly
4. No, there was no real plan issued as a document

2.3 Has there been a revision of the plan of the reform programme?

1. Major revisions have been made frequently 92
2. Major revisions have been made once or twice.
3. Only minor revisions plan hasn't changed at all
4. Plan hasn't changed at all

2.4 Since the programme took off, would you say that the implementation has been closely according to plan?

1. Deviated significantly 93
2. Deviated slightly
3. Adhered fairly closely
4. Adhered strictly

2.5(a) Who prepared the curriculum materials?

CRRD 94
Consultants 95
TRS 96

(b) To what extent would would you say that the materials reflect the objectives of the educational reform programme? 97-100

2.6 The following are some sources that some countries have used to obtain technical knowledge for the planning and implementation of similar educational reform programmes. (Give respondent a card bearing the list of success). Which of these sources were used in the Ghanaian case and how useful were they?

Knowledge	Effort expanded to acquire 010			Usefulness 011			
	High Effort	Some Effort	No Effort		Very	some what	Not at all	
Experts within Ghana	___1	___2	___3	101	___1	___2	___3	101
Experts outside Ghana	___1	___2	___3	102	___1	___2	___3	102
Documents on similar	___1	___2	___3	103	___1	___2	___3	103
programmes in other countries	___1	___2	___3	104	___1	___2	___3	104
Teachers & Teachers' Organisations	___1	___2	___3	105	___1	___2	___3	105
Professional staff of Ghanaian Universities	___1	___2	___3	106	___1	___2	___3	106
Books and documents on aspects of teacher training	___1	___2	___3	107	___1	___2	___3	107
Books and documents on education for development	___1	___2	___3	108	___1	___2	___3	108
Others (specify)	___1	___2	___3	109	___1	___2	___3	109

2.7 In your view, was acquiring technical knowledge considered to be an important aspect of the reform programme?
1. Extremely important 110
2. Somewhat important
3. Not at all important

2.8 In its present form, would you describe the reform programme as innovatory?
1. Entirely new and original, not based on outside technical knowledge 111
2. Represents a mixture of new old ideas from inside and outside
3. Represents a mixture of new and old ideas but almost entirely generated within the country.
4. Is primarily an adaptation of concepts and procedures already undertaken and implemented in at least one other country.

3.0 PARTICIPATION OF STAKEHOLDERS

3.1 What roles have political leaders played in shaping the course of the educational reform programme?
1. Have participated actively in all major phases 112
2. Have made key decisions
3. Have been represented on programme working teams
4. Have been represented on advisory groups
5. Have made speeches in support of the programme
6. Have had little involvement
7. Have been involved but in other ways (specify)....
8. Don't know

3.2 How have teachers and teachers' associations been involved?
1. Have participated in planning and implementation phases 113
2. Have made or participated in making key decisions
3. Have been represented on programme working terms
4. Have been represented on advisort group
5. Have had little involvement
6. Have been involved but in other ways (specify)....
7. Don't know

3.3 What roles have parents and communities played in the planning and implementation of the educational reform programme?
1. Participated in deciding the content of the curriculum 114
2. Have participated in making key decisions
3. Have contributed labour and money for providing classrooms and workshops.
4. Have provided housing for teachers
5. Other (specify). . . .

3.4 In what ways have local craftsmen and employers been involved in the educational reform programme?
1. Have provided work experience opportunities 115
2. Have served as resource persons
3. Have donated equipment and other school supplies to local schools
4. Have been represented on advisory groups
5. Other (specify) . . .

4.0 MONITORING & EVALUATION

4.1 How is the reform programme being monitored or evaluated : is it by existing mechanisms, or by new mechanisms, or by both?

1. Entirely new 116
2. Mostly new
3. Equal mixture
4. Mostly existing
5. Only existing

4.2 Are these mechanisms mostly informal (i.e. discussions between staff members or between Directors and staff) or formal (i.e. staff meetings, reports, workshops, analysis by special unit or person) ?

1. Mostly informal 117
2. Mixed
3. Mostly formal
4. Mixed

4.3 Who are involved in the monitoring / evaluation process?

1. Directors / Asst. Directors 118
2. Teachers' Associations
3. Headmasters and Teachers
4. Circuit Officers
5. Consultants from . . . . . 1 Ghana ; . . . . . 0 outside Ghana .
6. Other (specify) . . . .

5.0 RELEVANCE AND PROSPECTS

5.1 What, in your opinion, are the desired results of the educational reform programme? 119

5.2 Would you say that the educational reform programme is achieveing the desired results?

1. Yes . . . . . Go to 5.2 120
2. No . . . . . Go to 5.3
3. Don't know

5.3 What specific example can you give to show that the programme is achieveing the desired results? 121-24

5.4 Why do you think that the programme is not achieving the desired results? 125-29

5.5 Some people tend to be cynical about the role that education plays in the development efforts of the Third World countries. Do you, yourself, believe at the current educational reforms in Ghana can contribute to national development?

1. Yes . . . . Go to 5.5 130
2. No . . . . Go to 5.6
3. Don't know

5.6 What evidence is there that the reform programme has the potential to contribute to national development?

5.7 Why do you consider the reform programme as unlikely to help in the development effort? 135-39

5.8 From what you have seen of the educatioal reform programme since 1987, what can you say regarding the ultimate transformation of the educational system at all levels? 140-45

5.9 Would you wish the educational reform programme to continue in its present form?

1. Yes. 146
2. No . . . . Go to 5.9
3. Undecided

5.10 Would you wish to have adjustments made to the programme or abandon it altogether ?

1. Make adjustments . . . Go to 5.11 147
2. Abandon it . . . Go to 5.12

5.11 What specific changes would you want to be made? 148-54

5.12 What are your reasons for opting for abandonment of the new programme? 155-59

5.13 What do you believe to be the strengths and weakness of the educational reform programme?

(a) Strengths: 160-69

(b) Weaknesses: 170-79

5.14 What differences, if any, do you happen to have noticed between the present pupils / students under the reform programme and those of the previous systems in terms of

	Former	Present	
(a) 1 Culture:	1	2	180-89
(b) 2 Acquisition of vocational and life skills:	1	2	
(c) 3 Attitude towards manual work:	1	2	
(d) 4 Academic achievement:	1	2	

THANK YOU!

APPENDIX E

-Copy-

UNIVERSITY OF CAPE COAST
CAPE COAST, GHANA
FACULTY OF EDUCATION
DEAN'S OFFICE

Telephone: 2440-9 & 2480-9 Ext.285
TELEX: 2552, UCC, GH.

TELEGRAMS & CABLES: UNIVERSITY, CAPE COAST

Our Ref.: FS/SC. 277/6
Your Ref.:

4th October, 1994.

The Regional Dierctor of Education,
Regional Education Office, Sunyani.
Brong-Ahafo.

Dear Sir,

LETTER OF INTRODUCTION
MR. A. L. DARE

The bearer of this letter, Mr. Albert Dare, is a lecturer in the Department of Arts and Social Sciences Education in this University.

Mr. Dare is currently researching a Ph.D. degree at the University of Hull in the U.K. His research is on Education and Development and he would be pleased to visit some schools in your region to administer questionnaire to students and teachers and to observe how the curriculum materials for the educational reform are being transacted. He would also be grateful if your regional and district officers would grant him interviews concerning the implementation of the educational reform programme.

I shall be grateful if you will grant him access to your institutions and give him the necessary assistance.

Yours faithfully,

(signed)
(PROF. J ANAMUAH-MENSAH)
DEAN

c.c. Mr. Albert Dare,
DASSE,
UCC.

APPENDIX F

-Copy-

GHANA EDUCATIONAL SERVICE

REGIONAL EDUCATION OFFICE

In case of reply the number and date of this letter should be quoted

Post Office Box 30,
SUNYANI B/A.
Ghana, W/A.

Telephone No 607
My Ref. No.GES/BA/EF.203/Vol. 5/168
Your Ref. No. .....

10th October, 1994

TO DISTRICT DIRECTORS CONCERNED
1. SUNYANI
2. TANO
3. ASUTIFI
4. ASUNAFO.

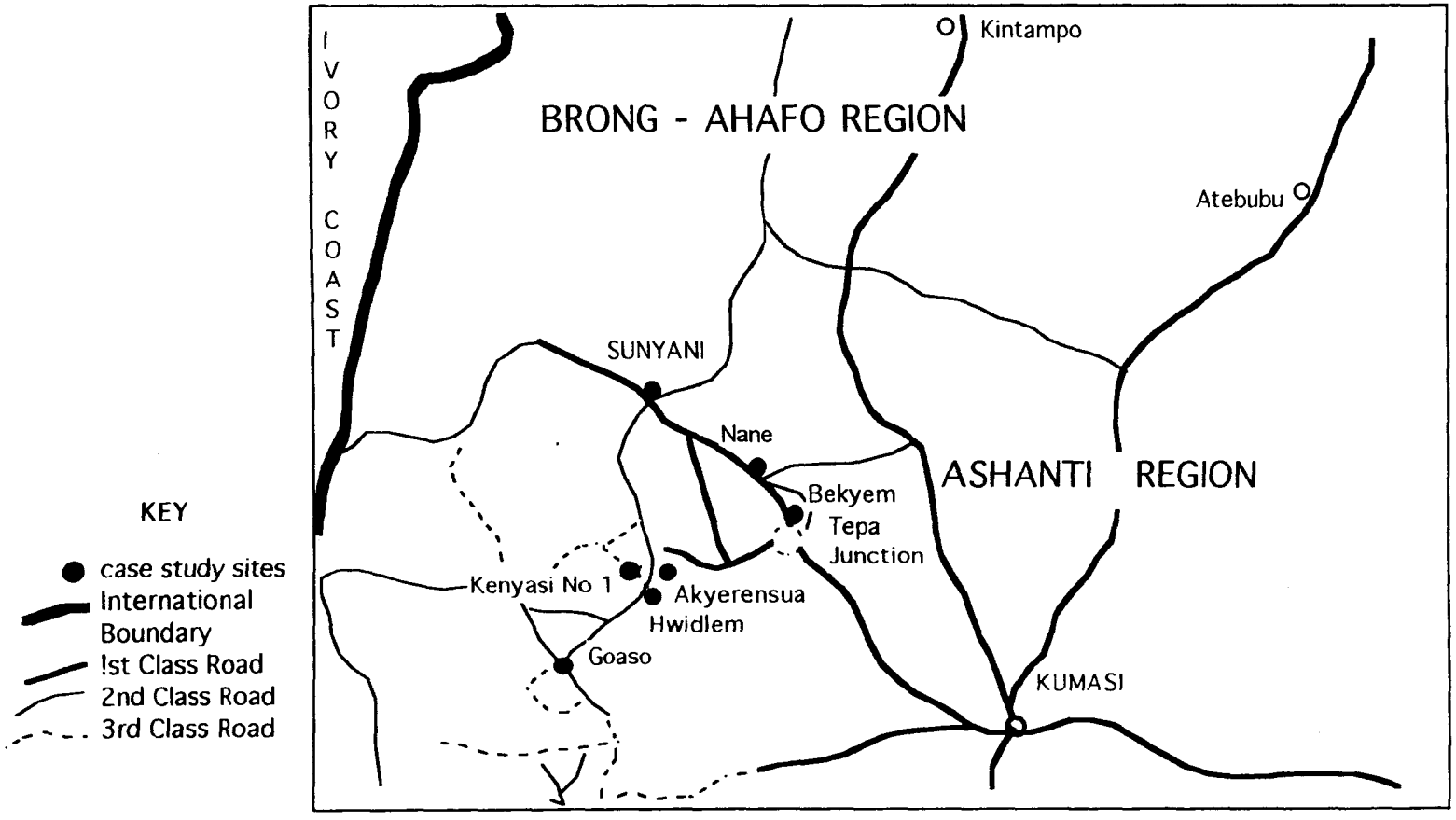
LETTER OF INTRODUCTION
MR. ALBERT DARE

The attached letter which speaks for itself requires that you give Mr. Dare, the bearer, the necessary assistance in his work.

I should be grateful if you would co-operate with him to make his work a success in this region.

(signed)
S.A. ABOSI
ASST. DIRECTOR
FOR: AG. REG. DIRECTOR, (B/A)

Appendix G **Map showing Case-Study Locations**



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